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A CRITICISM OF THE HAVANA CHARTER

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In their bulk and mass, the International Trade Charter and the Organization which is to administer it resemble a mountain rather than a mouse. Yet the significance and value of what has been achieved with such prolonged and expensive toil are far from clear. The basic principles which the Charter was originally intended to express and to enforce are wrapped up and swaddled in thick layers of exceptions and saving clauses, through which it may be hard for them to penetrate. Nor, speaking generally, is it possible to blame those who have insisted on the exceptions and saving clauses. The basic principles, it is increasingly manifest, could not possibly be applied immediately. Accordingly, the prevailing disposition among supporters of the Charter is apparently to stress its negative value as a restraint. Progress towards the goal of a nondiscriminatory, freely working international economy cannot, it is reluctantly conceded, be made just now; it may even be necessary to acquiesce in various movements in the opposite direction. But such retrograde movements must be carefully controlled and kept within the limits which circumstances really justify. This, it is claimed, is a function of great importance; and for it the International Trade Charter and the Organization are supposed to be well contrived.

This is so modest a claim that it may seem ungracious to question it. Yet I feel obliged to record my fear that the Charter may do more harm than good and may prove more of a hindrance than a help to the creation of a healthy international economy. The harm, it is true, may not be very great, and will mostly be of a less immediately tangible sort than there was once reason to apprehend. Countries to which import restrictions are indispensable in order to correct a large deficit in their balance of payments will not be debarred from effective action

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by their Charter undertakings. For these and many other contingencies, the exceptions and saving clauses make what should be adequate, though by no means wholly satisfactory, provision.

None the less, the question is pertinent whether the basic principles of the Charter are really sound and wise. Is the present difficulty of applying them only a transient one? Or does it spring from the fact that these principles are fundamentally ill-suited to the conditions and problems of the modern world? If the latter is true, the consequences of proclaiming them as the goal of policy are bound to be unfortunate. At the least, we must expect disillusionment, cynicism, a sense of frustration and considerable prejudice to the idea of international co-operation. On unfavourable hypotheses, there are more serious dangers to be feared in the years that lie ahead—friction and recrimination, charges of bad faith on the one hand, and undue interference on the other, bedevilling the relations between friendly countries and Anglo-American relations in particular.

The Principles of the Charter

Certainly, if such risks are to be avoided, it seems to me important that what I have called the basic principles of the Charter should be discussed far more freely, critically and objectively than has been customary hitherto. In the lengthy process of semi-official exchanges and fully official conferences which preceded the signing of the Final Act at Havana, discussion of these principles upon their merits played no part. They were a *chose jugée*. The principal governments concerned were already committed to them by the terms of the various Mutual Aid Agreements. It was only the manner in which they should be applied that was still open to argument.

The course of public discussion has been much affected by the same inhibition. British opinion especially has been influenced by a desire to avoid the impropriety of seeming to challenge principles to which we are committed. This reluctance is increased by considerable uncertainty and confusion upon the merits of the case. On the one hand, the principles in question do not seem to square with the policies which it is necessary to pursue. On the other hand, they are in full accord with a long established national tradition which still makes a wide appeal.

Confusion is indeed the chief characteristic of such discussion of the principles as has taken place. It is remarkable how seldom the arguments of the disputants seem to meet. This reflects, in my opinion, a deep confusion of thought in the principles themselves. Desirable aims are mixed up in them with false inferences and unwise behests; and I think it of real importance to try to disentangle them. The desirable aims may be formulated as follows: (a) a large and expanding

volume of international trade, which will permit the fullest possible realization of the advantages of an international division of labour; (b) as a condition of the foregoing, the utmost practicable scope for the processes of triangular or multi-angular trade and payment; (c) commercial policies which satisfy the desire for equity and fair-dealing between nations.

To these aims all sections of British opinion subscribe wholeheartedly and without reserve. It is a commonplace that Britain is far more vitally dependent on imports than any other country of comparable size. The ampler the dimensions of world trade as a whole the easier are we likely to find it to maintain the large external trade that is essential to us. We certainly desire conditions under which we can use exports to one market to defray imports from another, and thus avoid the need for a precise balancing of accounts with each country with which we trade. No country has better reason than Great Britain to fear the spread of "autarkic" ideas throughout the world, or to welcome the establishment of a code of international good behavior which would restrain arbitrary self-regarding acts of national policy injurious to the interests of others.

It may seem only a short step from these propositions to the principles of the Havana Charter, which may be summarized thus:

1. Non-discrimination;
2. Reduction of tariffs on the basis of reciprocal concessions;
3. Subject to a long series of reservations, the outlawry of import restrictions; to which should be added, though it appertains strictly to Bretton Woods, rather than Havana:
4. Free convertibility of currencies.

At first sight, admittedly, these seem appropriate means for achieving the accepted ends. How can international trade be enlarged unless trade barriers are reduced? Are not import prohibitions and restrictions usually the most drastic type of trade impediment, and the one which lends itself most readily to abuse by high-handed application? How can triangular trade be developed without facilities for exchanging one currency for another? What causes more ill-feeling or conflicts more obviously with the instinct of fair-play than discriminatory treatment? Surely, then, the Havana principles are proper ones to proclaim and press, provided that the detailed obligations make due allowance for the difficulties of applying them. All this is plausible, undoubtedly, but in my view it is seriously misleading.

It is misleading because the list of desiderata given above is incomplete. This list omits equilibrium in the balance of payments. The unhappy international economic story of the interwar period, the scarcely more promising experience of the last few years, both show that this is a requirement of paramount importance. Nor is it one which is ade-

quately met by the technique of escape clauses and exceptional provisions. Disequilibrium in the balance of payments is the central problem of modern international economics. No expansion of international trade can be soundly based, nor, therefore, can it prove enduring, unless this far-reaching disequilibrium has been overcome. This is indeed the chief task that confronts international economic statesmanship today, as also European statesmanship and the national statesmanship of many countries. It is a task, moreover, which calls pre-eminently for constructive action.

Non-Discrimination

There could be no more impressive recognition of this truth than that contained in the Marshall Plan. The central features of this plan are, first, the generous provision of dollar aid over a limited period of years, and second, the promotion of greater economic cooperation between the countries of Europe. The latter objective comprises in its turn two elements: appropriate financial arrangements, including aid from the relatively strong to the relatively weak, and the development of intra-European trade. Now this last policy embodies a principle which is very different from that of nondiscrimination. In effect, the Marshall plan says to the embarrassed countries of Europe: "You are finding it difficult to buy all the things you need from the United States. Well, we are prepared to help you for a time, in so far as you really need our help. But you must reduce your calls on us to a minimum. In particular, you must not look to the United States for supplies which you might obtain from one another without much difficulty." On the other hand, the principle of nondiscrimination says in effect: "You must not buy from one another (unless indeed you go so far as to form a Customs Union) goods that you might obtain from the United States or elsewhere at a slightly cheaper price."

There is a contradiction here which seems to me more fundamental and more significant than is commonly admitted. It is true, of course, that the Havana Charter virtually exempts countries which are in serious balance-of-payments difficulties from the restraints of the nondiscriminatory obligation, so long as these difficulties remain. And it can be argued without any logical incoherence that this obligation will become appropriate and desirable under "normal" conditions, when these difficulties are supposed to have disappeared. But it is precisely this sharp distinction between the exceptional and the normal which is fundamentally unreal. The restoration of basic equilibrium in the international balance of payments is no mere passing problem of the transition from war to peace. It is a long-term, large-scale task. Actual balance-of-payments deficits must, it is true, be eliminated, willy-nilly,

fairly soon; and disagreeable measures, including drastic import programmes and discriminatory trade arrangements may be needed in many countries for this purpose. But it may be no less necessary to retain such measures, however modified, for many succeeding years, to prevent these deficits from reappearing.

Again, it is true that by forming a Customs Union or free-trade area, or by making an "interim agreement" designed to lead to either of these things, European countries can obtain leave to discriminate permanently in favour of each other. In thus distinguishing between Customs Unions and preferences, the Havana Charter is, of course, in full accord with tradition; the same distinction used to be recognized in the application of the old-fashioned most-favoured-nation clause. The justice of this distinction has, however, long been doubtful. The members of a Customs Union discriminate much more decidedly in favour of each other, as against the outside world, than do the parties to a preferential trade arrangement. It is far from clear why it should be equitable and praiseworthy to practise discrimination in an extreme degree, but inequitable and reprehensible to practise it in a moderate degree. The distinction may be defended by various arguments resting on the plane of practical convenience, but its ethical basis is not easy to discern.

It is a distinction, moreover, which does not fit modern problems and modern facts. Benelux notwithstanding, a genuine Customs Union, in the sense in which the term has been understood in the past, is quite impracticable in the Europe of today. In many countries, import policy has now become, and is likely to remain, one of the main and most vital functions of government. In Great Britain, for example, the standard of living that can be enjoyed immediately, and on the other hand, the prospect of overcoming our balance-of-payments difficulties and maintaining our monetary reserves depend very largely on the rate of expenditure on imports of different commodities from different sources; and this is regulated by our governmental import programmes. This is not a function which the British government could allow to pass outside its effective control. Nor, I suggest, could the government of any other country which is faced with similar difficulties, and which intends to keep any substantial measure of independence. The idea of forming an effective free-trade area, with a uniform treatment of imports from countries outside it, is only really feasible between countries that are prepared to unite politically, and to unite, not in a loose federation, but under a highly centralized form of government.

This truth, however, is not yet as manifest as I believe it will become. Although any full Customs Union is clearly impracticable in

Europe for the time being, it is easy to cherish illusions that the obstacles may eventually be surmounted. It might even be possible, though in practice it would not be easy, to make early progress in adjusting tariff rates towards the requirements of a Customs Union, and to lean more heavily for the essential work of regulating imports on quantitative restrictions, assumed to be an emergency expedient. It may well be, therefore, that the Charter will serve to stimulate arrangements claiming to be "interim agreements" within the meaning of Article 44. In considering whether such claims are justified, the Organization will presumably adopt extremely tolerant standards, under the influence of the prevalent idea that any arrangements of this type represent a desirable development conducive to the general cause of European unity.

For my part, I doubt whether this idea is justified. It is certainly of the utmost importance to develop intra-European trade and to secure a "closer integration" between the economies of different European countries. But it is premature to suppose that we know today at all precisely how these ends can best be served. Arrangements that are really helpful must be highly flexible. To try to force them within the framework of a project for a Customs Union may well prove profoundly unwise. It may lead to subsequent deadlock and breakdown, injurious to the larger cause, which might have been forwarded by less ambitious arrangements. It is almost certain to involve an immense amount of make-believe and casuistry, corrupting to those who take part in it, and exasperating to others. Indeed, if any "interim arrangements" are approved, and a serious attempt is made to enforce the nondiscrimination rule elsewhere, countries which find themselves hampered by it will have good reason to complain that the dice are loaded against them.

Here I may observe that in British eyes the dice of the nondiscrimination rule seem already to be loaded against the preferential system of the British Commonwealth. A Customs Union between Great Britain and the Dominions is clearly impracticable; and no "interim agreement" could be made between them purporting to lead to this. But that is not all. Article 15 permits, subject to certain conditions, the establishment of new tariff preferences between countries which "are contiguous one with another" or which "belong to the same economic region." No such possibility is open to the countries of the Commonwealth which are separated by the oceans. Here the Havana Charter departs from tradition; for preferences between countries belonging to the same political system (and after all the British Commonwealth, despite the looseness of its formal structure, is an association which has stood the test of two world wars) were not regarded as violating the most-favoured-nation clause.

It is scarcely an exaggeration to say that the reduction of tariff preferences within the British Commonwealth is the only consequence of the Charter which is definite and certain. I appreciate the strength of the objections of American opinion to the arrangements of the Ottawa Conference of 1933. None the less I find it difficult to understand what useful purpose can be served by a reduction of Imperial Preference in the altered circumstances of the present day. Its maintenance, and where desirable its extension, could do no real injury to American export trade; for the Commonwealth will always be ready and anxious to import from the United States to the full extent of the dollars it can earn both directly and indirectly by export to other markets. On the other hand, the reduction and restriction of these preferential arrangements must tend in some degree to make it more difficult to restore and maintain equilibrium in the balance of payments between the sterling and the dollar areas.

The Reduction of Tariffs

I have already indicated my opinion that one of the main weaknesses in the philosophy which underlies the Charter is the distorted perspective in which it views the problem of balance-of-payments equilibrium. This should be recognized as a key objective; it should be a primary purpose of economic policy, both national and international, to establish and maintain it; and the provisions of the Charter should have been largely directed to this end. In fact, the Charter treats this vital matter in an essentially passive way. It takes it for granted that the balance of payments will normally be in equilibrium, and thinks it sufficient to concede, almost by way of afterthought, that when countries are threatened by serious deficits they may be allowed to indulge in practices which would otherwise be forbidden to them.

This misconception vitiates the approach to the problem of reducing tariffs. The Charter contemplates that tariffs should be reduced by negotiations between particular countries, based on the principle of reciprocal concessions. This, of course, is the fundamental principle of the American Trade Agreements Act; and it is easy to understand, in the light of the history of the measure, supported as it has been by the low-tariff and criticised by the high-tariff school of thought, that substantial tariff reductions could not be effected at present in the United States on any other basis. This, however, does not alter the fact that the principle in question ignores the possibility of a serious balance-of-payments problem, and is therefore ill-fitted to serve as the basis of international economic policy in the world of today.

Here again indeed there is a fundamental contradiction which is insufficiently appreciated. The principle of reciprocal concessions comes very near to saying that tariff reductions, calculated to increase Ameri-

can imports, can only be made in return for tariff concessions by other countries, calculated to increase American exports by an equivalent amount. This, in turn, comes very near to making it a *sine qua non* of tariff reductions that they should do nothing to solve the dollar problem or to readjust the balance of payments of the world. In practice, doubtless, the principle will be interpreted and applied more reasonably. None the less, it must serve as an obstacle to the rearrangements that are urgently desirable.

The true logic of the problem can be stated in a simple syllogism. To secure a balanced international economy, it is essential that the United States should increase her import purchases by much more than she increases her export sales. Therefore she should be ready to reduce her import duties, although other countries may find it necessary to maintain and even to increase theirs. More generally, it should be for countries to reduce their tariffs and encourage imports, not in proportion to the reciprocal concessions they are able to secure, but in proportion to the strength of their balance-of-payments position.

This, I submit, is one of the main principles on which a wise code of international good behaviour should be based. Doubtless it is still far removed from the region of acceptability to American opinion. Yet the logic behind it is so strong, and is likely to be driven home so insistently by the lessons of events, that I am not without hopes that it will gradually win an increasing measure of recognition and acceptance in the years that lie ahead. To this process, unfortunately, the embodiment of the opposite principle in the Havana Charter must be an obstacle.

In the meantime, it is important to note one influence which the treatment of tariff reductions in the Charter must be expected to exert. It is likely to stimulate and to prolong the use of quantitative import restrictions. If countries that find it necessary to curtail their expenditure on imports are unable to raise import duties for this purpose, they will rely increasingly on the alternative technique of quotas. This will be a paradoxical, and it may be a somewhat unfortunate, consequence. As will soon become clear, I do not personally share the extreme dislike of the quantitative method which forms a main element in the philosophy of the protagonists of the Charter. On the contrary, I believe that concrete or quantitative regulation is likely to play an important part in international economic life for a more or less indefinite future. For many commodities, however, imports are better regulated by duties than by quotas; and it is possible that for some commodities a combination of the two methods would be the most satisfactory arrangement. It is undesirable from every point of view to force the use of the quantitative method. Yet this may well be an

unintended result of the provisions of the Charter. If so, it will be attributable to the false assumption that import restrictions can be abolished altogether at an early date.

Quantitative Regulation, Exchange Rates and the Price System

As it emerged finally from the Havana Conference, the Charter allows quantitative regulation in so many different forms and for so many different purposes as to obscure the fact that the original intention was to prohibit the use of this method, save in the most exceptional circumstances. It is under this heading more than any other that exceptions and escape clauses were multiplied during the long-drawn negotiations that preceded the Final Act; and in practice, as I have just suggested, the Charter may well do more to stimulate than to check the spread of quota restrictions. It remains true, none the less, that in the minds of those who have done most to initiate and to push forward the project of the Charter, a strong dislike of quantitative regulation, as something inconsistent with, and inimical to, a self-adjusting price system, has played throughout a prominent part. It is, I think, more useful to consider the broad issue of economic policy which arises than the detailed provisions of the Charter relating to quantitative regulation.

The position from which I approach this question may be stated summarily as follows. When there are no large maladjustments that must be corrected, or no large readjustments that must be made, the economic system can be entrusted to the forces of the price system with the prospect of reasonably satisfactory results. But in any situation which calls for large-scale readjustment, it is necessary to supplement and sometimes to supersede these forces by more direct measures, consciously directed to the object which has to be attained. The forces of the price system are strong enough to effect small adjustments smoothly; but when the work they have to do is large, they are apt to prove clumsy, wasteful and ineffective.

As a special case of this general rule, countries in balance-of-payments difficulties must use the direct method of quantitative regulation to limit their expenditure on imports, and also apply appropriate measures of control to promote their export sales. That this may be necessary, as a strictly temporary expedient, is not now seriously disputed, even by those whom I call for convenience the ideologues of the price system. But many of them take the line that no difficulties can justify the continuance of such expedients for a prolonged period. If the maladjustment continues for several years, in the sense at least that it would reappear if the direct controls were removed, this proves, they would argue, that there is something radically wrong in the under-

lying price relations of the country concerned; and they believe that if this error were corrected, the maladjustment would disappear fairly soon. In other words, they concede that direct controls may be useful as a stop-gap; but insist that the work of readjustment must be taken over as soon as possible by price-system correctives. The particular corrective which appears to be most fashionable at the moment among adherents of this school of thought is the depreciation of exchange-rates.

This is a point of view which appeals especially to academic economists, who are tempted by a semi-aesthetic appreciation of the harmonious inter-relations of the price system, as pictured by theoretical analysis, to exaggerate its actual virtues. It represents the essence of the answer which some would give to many of the arguments I have used in the course of this article. They would readily agree, for instance, that equilibrium in the balance of payments is no less important than the expansion of international trade. But they would argue that the former object can only be secured by establishing proper price relations through such means as the adjustment of exchange-rates, and that tariffs, import restrictions or other trade impediments, though they may be of some temporary help as a stop-gap, can be no substitute in the long run for correct price relations. Therefore, they would conclude, it is right to concentrate on lowering trade barriers, and in particular on eliminating quantitative restrictions as soon as possible.

Such arguments have an appearance of profundity, which in my view is misleading. It is always important, I agree, to secure price relations which will help rather than hinder any readjustment which has to be made. It does not follow that price relations can be relied upon as the main active force for effecting the readjustment. In particular, there could be no more dangerous idea than that a depreciation of exchange-rates is the sovereign remedy for a balance-of-payments deficit. It is doubtless true that it is helpful to a country's balance of payments that its currency should be "under-valued" rather than "over-valued," though a high degree of "under-valuation" may be harmful. It is most rash to assume that the right degree of "under-valuation" can be brought about by lowering exchange rates. This must tend to raise internal costs, prices, and incomes; and since an inflationary movement is never easy to control, the ultimate result may be to raise internal prices to the full extent of the exchange depreciation. If the idea is that exchange-rates should then be lowered again, in the hope that next time the luck will be better, there is an obvious danger of a vicious spiral of internal inflation and devaluation. The recent experience of Italy and France shows that these are not fantastic pos-

sibilities. Nor should these object lessons have been necessary. The pertinent story of the nineteen-twenties should have been enough.

Of course, if internal inflation has led to a serious over-valuation of a country's currency, exchange devaluation may be essential. Indeed the recent fall of prices in the United States makes it probable in my opinion that it will prove necessary in the end to devalue sterling (together perhaps with other European currencies) relatively to the dollar; though it would be much better, if conditions permit, to defer this until *after* the inflationary trend in our own economy has been brought unmistakably to an end. It is vital, moreover, that any exchange-rate adjustments that are made should be once-for-all adjustments. The idea that frequently occurring exchange-rate variations might provide the regulating spring of an automatic international economy will not, I believe, stand up to critical examination; and the prominent part which it has come to play in modern price-system ideology is a most curious phenomenon. Before 1914, when an otherwise unregulated price system worked tolerably well, exchange rate stability was regarded as an essential feature of it; and it is still, in my opinion, an important desideratum.

Behind the practical dangers which would arise if an attempt were made to apply the new doctrine of exchange-rate variations, lies a more fundamental consideration. A country which has to adapt itself to straightened international means must readjust the structure of its economic life. It must alter its habits of consumption and production. Any necessary reduction of imports will be less injurious to its standard of life, if it is *selective,* falling heavily on some items and sparing others, than if it is indiscriminate. Therefore, a radical change in the composition of the country's imports may be needed. It is an illusion to suppose that such changes can be quickly brought about by price-system forces of any type, unaided by direct controls. In a sense, it may still be true that the need for such controls may prove to be only temporary. It may not continue after the new production and consumption habits have become established, and the country's economy has been recast securely in a new and appropriate mould. But the time required for this is certainly far longer than any that the conception of a transitional postwar period is apt to suggest.

Moreover, it is not only for the work of readjustment that quantitative regulation may be needed. It may also be useful for the purpose of maintaining stability, of minimizing the vicissitudes and disturbances which are apt to occur in an unregulated economy. The experience of the interwar years shows how serious such disturbances may be, and how unsafe it is to rely on the price mechanism to prevent them.

This truth is indeed recognised in the Charter in a few applications. It concedes the legitimacy of import restriction, for the protection and development of certain types of infant industry; and it must be expected that extensive use will be made of this concession.

The chapter on Inter-Governmental Commodity Agreements is based on the proposition that for primary commodities there may be a "tendency towards persistent disequilibrium between production and consumption, the accumulation of burdensome stocks, and pronounced fluctuations in prices." Here, accordingly, the Charter gives some positive support to the idea of quantitative regulation in the form of "commodity control agreements" on an international basis, though it seems unlikely that many such agreements would succeed in practice in running the gauntlet of the elaborate procedure and the rules and principles of Chapter VI. Similarly, Bretton Woods makes provision for the permanent retention of exchange control for the purpose of regulating capital movements; and no one who recalls the mischief that was done in the interwar period by the large erratic scurries of "hot" money can seriously dispute the necessity of this control in a world which has lost its faith in the stability of exchange rates.

Economic instability, however, may arise from many different causes and may take many different forms; and there is a correspondingly large variety of circumstances in which it may be wise to apply direct controls to the external sector of a country's economy in the interests of steady and orderly development. It is foolish to suppose that these circumstances can be adequately provided for by any list of exceptions which is drawn up now. Such exceptions will be apt to emphasize the arbitrariness of banning direct controls in other circumstances in which it may come to seem more justifiable and important to employ them. I can see no escape from the dilemma that those provisions of the Charter which are directed against quantitative restrictions must either be treated as a dead letter, or will arouse a resentment so strong as gravely to prejudice the idea of international arrangements.

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These are the reasons why I think it probable that the Havana Charter will do more harm than good. It is ill-related to the very difficult problems which exist and which loom ahead. The true aims of international economic statesmanship are in my view, first, to facilitate the large readjustments in the flow of international trade that are needed to restore equilibrium, and second, to ensure that readjustments are made in such a manner as to cause the minimum of avoidable injury and disturbance to the economic life of the world as a whole, and in particular to that of the United States.

At present the United States is generously providing large-scale financial aid to cover the deficits of Europe. It is very reasonable that Americans should insist that this arrangement cannot continue for very long. But the cessation of Marshall Aid implies an economic readjustment which must take the form, either of a greatly diminished demand for American exports, or a greatly increased importation of European or other goods into the American market, or possibly both; in any event, a large change in the import-export balance of the United States. If at the same time the sellers' markets of recent years are replaced by buyers' markets, the dangers of serious dislocation in the American economy are obviously great. It is urgently desirable that constructive thought should be directed to the problem of how these dangers can best be minimized, without obstructing the task of readjustment. This can only be done along very different lines from those of the Havana Charter.

INTERNATIONAL DISEQUILIBRIUM AND THE POSTWAR WORLD

By RAYMOND F. MIKESELL*

Classical international trade theory was concerned with the maintenance and restoration of international equilibrium through the pricing mechanism. The conclusion that such maintenance and restoration could in fact always be accomplished automatically through the pricing mechanism followed from the assumptions of free competition and the mobility and full employment of resources within each country. The absence of these assumed conditions, which were never fully realized, has made it necessary to consider states of international disequilibrium with respect to which corrective price adjustments are either prevented from taking place or would prove to be inadequate if they did take place.

Any attempt to classify disequilibrium as to types is dangerous because in any given disequilibrium situation more than one causal factor is almost invariably present. It may, however, be useful for purposes of analysis to differentiate between three types of disequilibrium situations: (1) those arising from disparities between internal and external prices and costs; (2) those arising from relative changes in the levels of national income at home and abroad; and (3) structural disequilibrium resulting from shifts in demand and supply conditions in internationally traded commodities or from changes in the invisible items in the balance of payments, which have not been brought about by changes in the relative levels of prices or incomes at home and abroad.

It will readily be admitted that any concrete situation may contain elements of more than one type of disequilibrium. Changes in relative levels of income in different countries are accompanied by relative price movements, while shifts in the structure of production and trade affect both prices and incomes. It is also difficult to determine which factors are *causal* in any given disequilibrium situation, in the sense that an appropriate adjustment of these factors would effect a cure. It may, for example, be found that relative movements in internal prices and costs have taken place but the removal of the disparities may have little effect on the trade balance because of the nature of demand and supply elasticities. Likewise, relative changes in the levels of national income may or may not have a significant effect upon

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trade balances, depending upon the nature of income elasticities of demand for the imports of the countries under consideration.

In considering the factors responsible for a given state of disequilibrium, it is important to distinguish between the problem of equilibrium for the group as a whole and for the individual country. Too often analysis has been confined to the problem of equilibrium for the individual country when perhaps the fundamental cause is to be found in the complex economic relationships among a larger number of countries. There are, of course, abundant cases in which small countries can take steps such as exchange rate devaluation or deflationary action to balance their international accounts without serious repercussions upon the international position of other countries. But where disequilibrium is widespread, corrective measures on the part of individual countries may fail to be effective in eliminating a general disequilibrium.[1] On the other hand, measures taken jointly by a group of countries may achieve beneficial results for the group as a whole which would not accrue to an individual country which undertook the same action unilaterally. For example, an individual country may find that an adjustment of its own exchange rate, all other rates remaining the same, would not materially affect its trade balance. A general adjustment of rates may, however, result in an expansion of trade among a group of countries with the result that the balance of payments problem of all members will be eased. This improvement might come about by reducing the dependence of all members of a particular group of countries on imports from a country whose currency was in relatively short supply. These same considerations with respect to the effects of actions of individual countries on other countries as a group will apply equally in cases of adjustments involving deflationary action or changes in the structure of production. Where disequilibrium is world-wide in character, corrective measures on a multilateral basis including planned alterations in the patterns of production and trade among a number of countries, may be called for. It is this type of disequilibrium situation which presents the most serious problem for the postwar world and with which this article is especially concerned.

The Disappearance of Automatic Correctives

In the decades since World War I, we have witnessed a gradual weakening or elimination of certain forces which in the past have operated to restore international equilibrium once it had been disturbed. The tendency on the part of treasuries and central banks to pursue

[1] For a discussion of the limitations of exchange depreciation for correcting general disequilibrium, see J. J. Polak, "Exchange Depreciation and International Monetary Stability," *Rev. Econ. Stat.*, Vol. XXIX, No. 3 (Aug., 1947), pp. 173-83.

internal monetary policies which are independent of changes in their holdings of gold and foreign exchange was observed in the 1920's and 1930's, and has now become almost universal. While this development tended to eliminate adjustments *via* the specie-flow-price mechanism, the widespread adoption during the 1930's of compensatory fiscal policies which offset decreases in incomes resulting from the emergence of trade deficits had the effect of preventing a restoration of equilibrium through changes in relative levels of money income among trading nations. Since the end of World War II, new interferences with the mechanism of international equilibrium have appeared, some of which may prove to be transitory, but others, depending upon the ultimate outcome of current trends in the character of economic institutions and trade practices among the nations of the world, may prove to be permanent. We may list a few of these developments as follows:

a. *Internal price and distribution controls, international commodity agreements and bilateral trading arrangements.* Such controls and agreements tend to insulate internal price systems from external forces. Changes in prices and in demand and supply conditions in one country are not permitted to have their normal effects on prices in other countries.

b. *The expansion of state trading.* Imports by state trading organizations are likely to be governed by the requirements of planned internal investment and consumption programs rather than by the operation of free-market forces. Likewise, export trade under state control, especially when accompanied by the allocation of resources for the export industries, may tend to be relatively unresponsive to world market conditions. When state trading is combined with bilateral trade agreements, the character of the trade will in considerable measure be determined by the requirements of the bilateral bargaining. For example, countries in a weak bargaining position may have to accept certain unessential or luxury commodities along with the more scarce items which they seriously need.[2]

c. *Unrealistic patterns of exchange rates.* Improper rates not only make it difficult or impossible for countries to achieve equilibrium without the use of controls, but they tend to direct trade and production for export into abnormal and uneconomical channels. For example, postwar intra-European trade has been characterized by a high proportion of trade in luxury products (where prices are generally uncontrolled) whereas such commodities should either move to the dollar area or not be produced at all. Exchange rates which do not reflect differ-

[2] *Survey of the Economic Situation and Prospects of Europe* (United Nations Economic and Social Council), reprinted for the use of the Senate Committee on Foreign Relations (Washington, D. C., 1948), p. 101.

ences in prices and costs between countries also tend to encourage barter trade since normal commercial trade at existing rates becomes impossible.

d. *The existence of large international debts which must be serviced in gold or hard currencies.* Debt service payments represent an inflexible item in a country's balance of payments and make adjustments *via* the merchandise balance more difficult.

e. *The inability or unwillingness of nations to achieve internal price stability.* Many nations have plans for reconstruction and development programs which will require large annual capital outlays for the next decade or more. The constant pressure for higher wages and the demand for social reforms and betterment of the working classes may, however, mean a level of savings insufficient to finance such programs except by inflationary devices. Whether inflation is open, *i.e.*, accompanied by price rises, or suppressed, *i.e.*, accompanied by rationing and price controls, imports will be encouraged and exports discouraged and a balance will be difficult to maintain. Under inflationary conditions, either foreign exchange rates must be permitted to rise or import controls must be employed. Most governments, however, prefer controls to devaluation since devaluation increases the prices of essential commodities which in turn adds to the internal inflationary process.

f. *The almost universal adoption by governments of fiscal and monetary policies which seek to control the volume of monetary demand independently of the volume of monetary reserves and of the balance of payments.* The whole principle of automatic correctives rests on the assumption that internal monetary demand will be responsive to changes in the payments balance without deliberate interference on the part of the economic authorities. The existence of inflexible prices plus the power of trade unions to prevent wage reductions even in the face of unemployment, may require the monetary authorities to offset the effects of an adverse balance in order to avoid severe depression.

In the light of the above developments, it seems unlikely that automatic correctives will be available for maintaining a reasonable degree of international balance, even after the present structural maladjustments brought about by the war have been eliminated. Internal economic policies are likely to be determined primarily with reference to governmental planning considered necessary to achieve domestic objectives such as full employment, capital reconstruction and development, and higher living standards for the masses. Foreign trade and exchange policies must be adjusted to the needs of the domestic economy for carrying out these objectives. Under these circumstances, many nations may be unable to adopt foreign economic policies which

are consistent with a current international balance achieved without the use of controls.

The Significance of International Equilibrium

The concept of international equilibrium as it is generally used in economic literature is based on the classical postulates of a world in which economic decisions are made by free private enterprise operating without governmental interference, except for tariffs. The usual test of whether or not a country is in equilibrium is to determine whether total receipts from current transactions plus long-term capital imports are equal to total current payments plus long-term capital exports. A true equilibrium in the classical sense cannot exist if it is achieved by means of exchange and trade controls. But, in a country which maintains a high degree of internal economic controls, direct or indirect control over foreign trade is almost inevitable. A nation is not likely to nationalize its steel industry and permit free foreign trade in steel, nor is a nation which finds it necessary to allocate scarce materials among domestic producers likely to permit free foreign commerce in these scarce materials or the products manufactured from them.

The question arises as to what significance the concept of equilibrium has for controlled or partially controlled economies. In the case of state-controlled economies, we might define equilibrium in terms of internal and external cost-price relationships.[3] Thus a nation would be in equilibrium if it purchases everything abroad which could be obtained at prices below domestic costs and exported everything not consumed at home at prices which covered domestic costs, provided total receipts and expenditures were equal after adjustment for long-term capital movements. It is theoretically possible for planning to achieve just this result, but this ideal has never been approached by planned economies either because the planners have been more concerned with non-economic ends or because of poor planning. One difficulty is that the government rather than the ultimate consumer may frequently make the decision to increase or decrease imports. Suppose, for example, that the government decides to expand its purchases of foreign capital equipment. In order to maintain equilibrium, shifts in internal production and in aggregate monetary demand would have

[3] It should be pointed out that the political authorities in controlled economies may have non-economic ends which often conflict with economic ends such as the maximization of real national product, *e.g.*, the carrying on of economic warfare or the liquidation of the Kulaks. Moreover, different economic ends may conflict. For example, efforts to secure a more equitable distribution of income for the purpose of maximizing welfare may conflict with the maximization of the national product in the future. Hence, in defining equilibrium for any given nation we would need to take into consideration both economic and non-economic ends.

to be made so that imports of consumption goods will be reduced or exports increased sufficiently to restore the balance without rationing and without violating price-cost ratios. In so-called "mixed" economies where the government controls investment in certain fields and hence imports of capital equipment, the problem of adjustment would appear to be even more difficult than in completely controlled economies.

A definition of equilibrium in terms of internal and external price-cost relationships is not likely to be very useful in dealing with immediate problems, although it has theoretical significance as an ideal for all countries to strive for. A practical concept of short-term equilibrium must take into account the organization of the particular economy under consideration and the economic objectives which the economic authorities have in mind.[4] Thus in a relatively free economy the balance should be achieved with a minimum of trade controls. On the other hand, in a controlled economy one would expect controls on external trade which were consistent with internal controls and with the objectives of the planning authorities. If it were the policy of the economic authorities that the nation could not afford to consume certain luxury commodities, their importation as well as their domestic production would properly be forbidden. Or if the government decided to use a larger proportion of the nation's foreign-exchange receipts for imports of capital equipment and to direct consumer expenditures away from imports, appropriate controls might be employed.

How then shall we define short-term equilibrium for a controlled economy? It can only be defined in terms of some deliberate plan for the employment of the resources of the economy and the distribution of the product among the consumers. Presumably the economic authorities will determine certain production goals and certain standards of consumption consistent with the productive capacity of the country. We might define equilibrium for a controlled economy as a condition in which current foreign-exchange receipts were sufficient to pay for that volume of imports necessary to (1) carry out a production plan based on the most efficient use of existing productive resources and plant capacities in the light of consumption and investment goals, (2) achieve a predetermined program of investment, and (3) maintain a predetermined level and composition of consumption. The level of capital investment may be determined by the amount which the economic authorities believe is necessary to achieve equilibrium at some point of time in the future in the light of the consumption goals of the planning authorities, or it may be dictated by the requirements of military pre-

[4] It must be kept in mind that these economic objectives may be dictated by underlying political objectives.

paredness. The consumption goals may be related to some historical or accustomed level or to that level which is believed to be the minimum necessary for political stability.

In the case of "mixed" economies, the concept of equilibrium must take into consideration the ability of the country to balance its international accounts without the aid of exchange and trade controls outside of the controlled sector, while at the same time financing those imports necessary to achieve its pre-determined goals in the controlled sector. For example, the government might control imports of all industrial raw materials, capital equipment, and basic foodstuffs but in the absence of balance-of-payments difficulties would permit free importation of other categories of commodities.

If in the case of controlled or partially controlled economies short-run equilibrium as we have defined it is consistent with the existence of trade controls, what are the criteria for determining the existence of disequilibrium? Clearly a country is not in equilibrium if its current receipts of foreign exchange, including normal capital imports,[5] are insufficient to pay for the raw material imports required to maintain its industries at the desired level of production, the imports of essential commodities needed to maintain pre-determined standards of consumption, the imports of capital equipment and materials for planned investments, and for its various commitments on invisible account. It may turn out that balance-of-payments equilibrium in the short run is impossible except at the cost of a disruption of important industries, the shelving of urgent reconstruction projects, or a politically disastrous reduction in living standards. This is indeed the situation among many of the countries included in the European Recovery Program. When a disequilibrium develops, controlled economies must either draw on their reserves, obtain financial assistance from abroad or reduce their imports. Unless there exists a substantial volume of luxury or nonessential imports, a reduction in imports may be quite difficult to achieve in the short run because the economy is geared to a particular level of import requirements. In time, industries can be reorganized, substitutes for imported commodities can be found and standards of consumption can be altered. Equilibrium in controlled economies, however, is eventually restored not so much by the effects of the shift in the balance of payments on incomes and prices, but by a realization of the plans of the economic authorities for the achievement of their investment and consumption goals without further for-

[5] Normal capital imports exclude emergency loans and grants from other countries and international lending organizations. They would include loans from the World Bank and the Export-Import Bank for planned capital investments.

eign assistance or the liquidation of reserves, or by a revision of their basic economic plans and objectives.

In the case of partially controlled economies, an evidence of disequilibrium would be an extention or tightening up of existing import controls or the failure to achieve desired objectives in the controlled sector. Additional exports might be brought under the licensing system and perhaps an effort made to increase exports by diverting resources from commodities produced for home consumption. Restoration of equilibrium in partially controlled economies can be said to be completed only after temporary restrictions on transactions in the uncontrolled sector have been removed. Thus, if the economic authorities have brought raw materials, investment goods and basic foods and fibers permanently under state control, but normally permit the free importation of consumers' goods, any restriction on the importation of consumers' goods might be considered as a departure from equilibrium, unless similar restrictions or taxes were placed on domestically produced goods of the same general type. The latter would of course represent an extention of the controlled sector of the economy.

To say that disequilibrium exists for controlled economies when plans are not realized may be open to the charge of question begging. However, there is a genuine need for a working concept of equilibrium applicable to controlled economies.[6] The concept of balance-of-payments equilibrium is employed in the decisions of international financial institutions such as the Monetary Fund and the World Bank, and plays an important role in determining the need for financial assistance under the European Recovery Program and other U. S. government foreign aid programs. It is an important tool in international economic analysis generally and needs to be redefined to conform with current realities. The point to be kept in mind is that disequilibrium has significance only in the context of the organization of the economy under consideration, and of the objectives of its planning authorities. The fact that a country is unable to achieve a balance in its international accounts can no longer be employed as a criterion for the granting of short-term financial assistance in the expectation that the balance will in time be automatically restored. Nor can this fact always be considered as a sufficient justification for exchange depreciation or other remedial actions on the part of the country concerned.

Balance-of-payments deficits may be planned or unplanned under

[6] See my "Role of the International Monetary Agreements in a World of Planned Economies," Jour. Pol. Econ., Vol. LV, No. 6 (Dec., 1947), pp. 497-512. See also my "Reply" to a criticism of this article, Jour. Pol. Econ., Vol. LVI, No. 5 (Oct., 1948), pp. 446-50. It has been suggested that we need a new term such as "planned international balance" to describe equilibrium for controlled economies.

controlled or partially controlled economic systems. Obviously such deficits will not be planned unless the means of meeting them are available. The deficits of the ERP countries are planned, and the Economic Cooperation Administration has asked the countries receiving United States financial aid to plan their investment, production, and trade so as to enable them to achieve certain consumption goals by 1952 without further United States assistance. Whether or not the realization of these goals, assuming they can be realized, will mean equilibrium for the European Recovery Program countries, depends upon the organization of their economies and their ability to achieve a balance in their international accounts without the use of restrictions which violate the basic principles of their particular economic organization, *e.g.*, import quotas needed for balance-of-payments reasons imposed on types of commodities the consumption of which is normally not controlled.

Controlled and "mixed" economies may also experience unplanned deficits in their balance of payments. Among the causes of unplanned disequilibrium we may cite war and national disasters, crop failures, strikes and political disturbances, domestic inflation, the inability to market exports abroad either because of price factors or shifts in foreign demand, or simply poor planning and forecasting. In the case of "mixed" economies where production and distribution are only partially controlled, planning and forecasting become much more hazardous and consequently equilibrium more difficult to maintain. For the uncontrolled sector of the economy reliance must be largely on indirect controls of a monetary and fiscal nature.

Thus far, we have spoken of disequilibrium in terms of a country's over-all balance. In periods when currencies are almost universally inconvertible a country may be in over-all balance but because of the inability to convert current surpluses with some countries into the currencies of other countries, that country may find it necessary to direct its trade by discriminatory measures. Such measures would include discriminatory import regulations against the country whose currency was in short supply and perhaps measures designed to increase exports to that area. Although this is a clear case of disequilibrium for the country concerned, the country may be the victim of a worldwide disequilibrium. In such cases the remedy may lie beyond the power of the individual country acting unilaterally, except at the cost of far-reaching changes in the pattern of its international trade.

Sources of Postwar Disequilibrium

In discussing the sources of postwar disequilibrium, it is important first of all to make clear just what kind of disequilibrium we are talk-

ing about. The vast majority of the countries have what we have called "mixed" economies with varying degrees of governmental control. The long-run objective of most of these countries is to achieve a large measure of consumer choice with respect to home-produced and imported commodities alike, and also to restore to private enterprise a large measure of freedom as to what to produce and where to sell, and where to buy raw materials and capital equipment. Unless these countries can count on foreign assistance for an indefinite period of time, they must either achieve equilibrium in the sense in which we have used it in the preceding section, or they must abandon certain of their economic objectives. The alternatives may be the abandonment of certain investment or social welfare objectives, or the objectives of restoring freedom of consumers' choice and freedom for business enterprise in certain fields. The failure of a "mixed" economy to restore freedom of consumers' choice and freedom of business enterprise in those sectors of the economy for which such freedom is required in accordance with the basic structure and objectives of the country concerned will be considered as an evidence of disequilibrium for that country. One of the reasons for such failure may be the fact that the restoration of economic freedom is found to be incompatible with other economic objectives considered to have a higher priority. Disequilibrium for a "mixed" economy would also be evidenced by an inability to purchase with current foreign-exchange receipts sufficient imports to achieve a reasonable level of productive efficiency and standard of consumption, consistent with its productive resources. This would also be an evidence of disequilibrium for more or less completely controlled economies. In the following paragraphs we will discuss the sources of postwar disequilibrium in the special sense in which we have just defined it.

The major source of disequilibrium in the immediate postwar period has been the destruction and general dislocation caused by the war itself. Given a few years of peace and adequate Western Hemisphere assistance to rebuild and restock the major economies of the world so as to permit a return to something like prewar per capita production levels, the disequilibrium resulting from the physical destruction and temporary disruption of production and commerce caused by the war can be eliminated. What we are concerned with here are possible sources of disequilibrium which may persist perhaps for the next generation or more, after production has been restored to a level approximating the potentialties of the human and material resources of the countries of the world. For purposes of analysis I have classified these sources of disequilibrium in four categories: (1) relative changes in levels of real national income; (2) domestic economic instability; (3) changes

in international creditor-debtor relationships; and (4) shifts in the structure of world production and in the character of world demand. Both (3) and (4) may give rise to what was called "structural disequilibrium" in the opening paragraphs of this article. However the changes in the "income from investment" account in the balance of payments of most trading countries have been so significant as to warrant separate treatment. These four categories are by no means water-tight and it will be readily seen that developments in any one of them will affect the other three.

1. *Relative Changes in Incomes*

Of the four general sources of disequilibrium outlined above, probably the greatest emphasis in recent years has been placed on relative shifts in national incomes as the leading cause of disequilibrium.[7] This concern is largely based upon the fear of another major depression in the United States. While I quite agree that relative shifts in the levels of national income may be an important factor contributing to disequilibrium in the postwar years, it is by no means certain that economic conditions of the early 1930's will be repeated. In fact, there is reason to believe that national governments are not likely to permit prolonged and severe depressions in the future. Not only have the governments of nearly all major countries, including that of the United States, accepted as a matter of national policy the responsibility for maintaining high levels of employment, but the increased functions of government have brought a substantially larger proportion of the national income under the control of governmental authorities.

Although we may not again see depressions of the 1929-1933 proportions, shifts in the relative levels of income may still be an important source of international disequilibrium. Short-term cyclical movements in incomes and employment and perhaps extended periods of moderately high unemployment are of course quite probable in the United States and other countries where economies are largely uncontrolled. Although controlled economies will also be subject to fluctuations in real income and employment with changes in the structure of production, governmental authorities are better able to maintain total monetary demand. Hence, money income, if not real income, is less likely to decline in the controlled economies than in the relatively free economies.

If we are to separate relative changes in national income from other causal factors, we must consider only changes in real income. In spite

[7] See, for example, T. Balogh, "The International Aspects of Full Employment," *The Economics of Full Employment* (Oxford Institute of Statistics, 1944).

of the fact that, barring depressions, real income in the United States may continue to increase at a rate of 3 to 4 per cent per year, it is quite possible that real incomes in many undeveloped areas of the world will rise more rapidly than in the United States. The industrialization programs of Latin America and Asiatic countries, and perhaps a more efficient utilization of human and material resources in previously undeveloped or primitive areas may well make for a rapid expansion in real incomes the world over. Thus disequilibria from shifts in relative incomes in different countries may come not so much from depressions in the United States as from continually rising incomes abroad. The propensity to import in most countries of the world is undoubtedly higher under present conditions than in the United States where a diversified economy supplies most of the things for which consumers have a high income elasticity of demand.[8] Given a higher propensity to import abroad than in the United States, disequilibrium could accompany an increase in incomes in the rest of the world at the same rate at which United States national income increases. But this situation may only be true in the short run. The potential demand for foreign goods of a luxury or semi-luxury type requiring a high proportion of labor may turn out to be quite large if foreign sellers were to market and advertise on a nation-wide scale.

2. *Domestic Instability*

The Western World has lived so long in fear of unemployment and deflation that the possibility of a generation of more or less continual inflationary pressures has not been given very serious consideration. Yet if economies in which investment decisions are made by private enterprise tend toward underinvestment, economies in which investment is largely in the hands of the state may suffer from the opposite condition. Moreover, once the economic authorities have adopted a policy of maintaining full employment and have equipped themselves with the necessary monetary and fiscal instruments for carrying out this objective, errors in planning and forecasting are likely to be made only in the direction which involves the less serious political consequences.

Almost every country, from the most backward agricultural countries to the more advanced industrial ones, has reconstruction and development plans requiring large amounts of capital and foreign ma-

[8] Dr. T. C. Chang in an article entitled "International Comparison of Demand for Imports" has calculated the income elasticity of demand for imports for a number of countries. In the case of highly industrialized countries like the United States and the United Kingdom, income elasticity is shown to be substantially lower than income elasticities in less industrialized and agricultural countries. *Review of Economic Studies*, Vol. XIII (2), No. 34 (1945-46), pp. 53-67.

terials and equipment.[9] This development is likely to affect the demand for United States products in two important ways. First, the demand for United States capital equipment may be maintained at a relatively high level for the next generation or so, since barring another world war, only the United States may have the surplus productive capacity to meet world needs for a large number of capital items. Regardless of competitive price adjustments there would be only one country capable of meeting the demand. A second way in which the potential demand for United States commodities may be sustained at a high level is through the increased purchasing power of the masses in the countries undergoing rapid capital development. In many countries industrialization will undoubtedly be accompained by a redistribution of income in favor of the working classes at the expense of landed aristocracy or other property owners. Such redistribution will mean a reduction in the propensity to save and an increase in the propensity to import. At the same time, the development projects will be absorbing a large share of the foreign exchange receipts and may in some cases reduce the proportion of material and human resources available for the production of exports.

In order for large-scale capital projects calling for an accelerated rate of capital accumulation to be financed from internal sources without inflation, it is necessary either to have unemployed human and material resources or to put into operation a rigorous system of fiscal, monetary,[10] wage, and credit controls which will restrict purchasing power to the amount of available consumers' goods. External financing through loans or grants for developmental purposes are likely to be limited to the foreign exchange required to purchase the materials and equipment directly employed in the project itself and which are not available from internal sources.[11] Ordinarily one-half to two-thirds of the expenditures on capital projects are made for local materials and services. In few countries outside of the United States is there a large volume of volutary saving available for domestic investment, and rapid capital accumulation can only be realized at the expense of living standards which are already low relative to prewar standards. Moreover, few governments have the courage to take the necessary steps to curtail

[9] See *Economic Report: Salient Features of the World Economic Situation, 1945-1947*, United Nations, Department of Economic Affairs (Lake Success, Jan., 1948), pp. 243-55, for a summary of investment projects in various countries.

[10] Some economists believe that a substantial increase in the volume of savings can be induced by raising interest rates, although in the opinion of the author there are severe limitations on purely monetary measures.

[11] For example, neither the World Bank nor the U. S. Export-Import Bank will ordinarily make loans to finance local currency expenditures in the borrowing country.

the purchasing power of the masses as a means of reducing real consumption. The propensity to save has been generally reduced by mounting taxes on the wealthy and most countries are seeking to raise the real incomes of the masses by an extension of social services. The net result is that capital accumulation in many foreign countries is being financed in large measure through inflation.[12]

For many countries, the need for rapid capital investment in order to achieve the structural changes necessary to realize international equilibrium within a relatively short period presents a real dilemma. If monetary incomes are restricted to the point where consumer demand just equals the current output of consumers' goods, the expansion of production in certain fields may be accompanied by a disruption of other industries. Inflexible wage policies on the part of labor unions plus the necessity of attracting labor and resources to the investment industries may render extremely difficult the realization of production goals in the face of disinflationary policies. Disinflationary measures may also be hampered by the existence of sizeable accumulations of liquid assets in the hands of the public which could be used to defeat attempts to lower consumption standards on the part of the holders. It is quite likely, therefore, that many countries will find it impossible (for political and economic reasons) to carry out large investment programs and avoid a certain degree of domestic inflation at the same time.

How long will disequilibrium from these sources continue? Essentially what we are confronted with are the international repercussions of a worldwide trend toward the socialization of investment, *i.e.*, the transfer of investment decisions from private to governmental or quasi-governmental authorities. We are also confronted with the international repercussions of a redistribution of income in favor of the masses and a general weakening of the influence of the international pricing mechanism in economic decisions over production and consumption. In time, patterns of economic controls may be evolved which will restore domestic stability and international equilibrium. The new capital instruments may raise real per capita income (unless defeated by population pressure) and economic authorities may adopt appropriate controls which will relate money incomes and voluntary saving to the level of capital expenditures. Finally, imports for investment purposes will have to be planned in relation to the over-all demand for imports in such a way as to avoid either a balance-of-payments deficit or an in-

[12] The ratio of gross domestic investment to gross national product is substantially higher than prewar in the case of many European countries. For example, in the case of the United Kingdom the ratio was 20.4 per cent in 1947 as compared with 14.5 per cent in 1938. (Source of data: *National Income and Expenditure of the U. K., 1947* [Md. 7371]) A similar increase in this ratio appears to have taken place in France and the Netherlands.

crease in the scope of direct consumer controls not contemplated by the basic plan for the economy.[13]

3. *Changes in Creditor-Debtor Relations*

A source of postwar disequilibrium which especially affects the United Kingdom and certain countries of Continental Europe is the loss of prewar sources of invisible income. In 1938, net invisible income for Europe as a whole from non-European sources amounted to about $2.1 billion, an amount which equaled Europe's deficit on trade account.[14] In 1947, Europe had a net deficit on invisible account of $0.6 billion, $0.4 billion of which was with the United States. A part of this deterioration in Europe's invisible account is due to a temporary reduction in tourist trade and shipping services, and we may look forward to a rapid restoration of these sources of income. The large overseas expenditures for maintaining troops and fighting colonial wars, and for relief in occupied areas may also be regarded as temporary. However, approximately a billion dollars of the reduction in Europe's net invisible income is accounted for by a net reduction in income from foreign investment, about half of which can be attributed to the United Kingdom alone.

Although income from investments in certain of the war-devastated areas may be eventually restored, the over-all position of Europe on investment account is certain to deteriorate with the making of interest payments on the large dollar loans. From July 1, 1945 through June 30, 1948, loans and credits to foreign countries by the United States government totaled nearly $12 billion and an additional $1.2 billion was loaned or committed by the World Bank and the Monetary Fund. If we add to these amounts long-term private investments abroad since the war, we reach a figure of over $15 billion on which service in dollars must be made, the vast bulk of which must come from the countries of Western Europe. Over the next three years, assuming that the Economic Cooperation Administration program is continued, total foreign investment on both private and governmental account is likely to increase by another three to four billion dollars, with perhaps an additional $2 or $3 billion in loans from the World Fund and Bank. The net effect of these loans upon the international balance of payments will of course depend upon whether or not new loans will continue to be made in amounts sufficient to offset repayments. Private foreign investments probably cannot be counted on to maintain the necessary gross level of investment so that the outcome becomes largely a matter

[13] For example, if consumers are to be denied certain luxuries they should be denied both foreign and domestically produced luxuries of the same category.

[14] See *A Survey of the Economic Situation and Propects of Europe*, p. 55.

of United States governmental lending policy. But interest payments alone on over $20 billion in additional foreign indebtedness will absorb a significant portion of the dollar income of the rest of the world.[15]

4. *Structural Changes*

Probably the most serious obstacle to the restoration of a balanced world economy which would permit countries, planned and unplanned, to achieve the maximum efficiency in the use of their productive resources and the highest living standards for their people lies in deep-seated maladjustments in the structure of world production and demand. Some of these structural factors are a direct outgrowth of the late war, while others are perhaps a product of far-reaching socio-political and technological development which are taking place too rapidly to be accommodated by the international economic organism. We will summarize some of these structural factors in the following paragraphs.

Although the overwhelming demand for United States commodities during the immediate postwar period can be explained by the disruption of production outside the Western Hemisphere caused by the war, the capital needs for reconstruction and the backlog of deferred demand built up during the period of wartime shortages, there is considerable evidence that the potential demand for United States commodities in excess of the dollars supplied by United States imports may continue for many years after prewar production levels have been generally restored or even substantially exceeded. Mention has already been made of large-scale industrialization and development programs throughout the world which call for large amounts of specialized capital and materials available in surplus quantities only in the Western Hemisphere. This enlarged demand for investment type comodities may be superimposed upon the normal heavy dependence upon United States and Western Hemisphere exports, unless offset by compensating shifts in demand for the exports of other areas. Such shifts, however, do not depend simply upon competitive price relationships but are in

[15] According to the Department of Commerce publication, *International Transactions of the U. S. During the War*, by 1951 receipts of interest and amortization on all U. S. government postwar loans should amount to about $450 million, and if dollar loans through the International Bank should rise to $4 billion, an additional $200 million in interest and amortization will be required. Together with payments of around $1 billion on loans and investments existing at the end of the war, total payments will amount to $1.6 or $1.7 billion before allowance is made for additional governmental and private loans and investments in the years following 1947 (p. 161). During 1947 and 1948 net private long-term capital flow has been averaging around $700 million per year, and over $1 billion in loans were extended by the United States during 1948. It seems quite likely therefore that earnings and amortization payments owed to the United States will be well over $2 billion by 1951.

considerable measure dependent upon the creation of new sources of supply in areas outside the Western Hemisphere.

What is the result of a shift in world demand in favor of the products of a particular country or area? Let us assume that before the shift occurs all countries have succeeded in achieving a balance in their current international accounts. Immediately after the shift certain countries will find themselves with current account deficits which they must correct by reducing their imports or by adopting measures to expand their exports either to the country or area whose exports have increased, say the United States, or to third countries. Now let us assume for the moment that the demand for imports on the part of the United States is inelastic, and that the elasticity of substitution between United States exports and the exports of the rest of the world is quite low. Under these assumptions, equilibrium must be restored either by an expansion of production in the rest of the world of the commodities which constitute the exports of the United States or by a reduction in the demand for these commodities. But it may not be possible to realize either of these alternatives without substantial adjustments in the structure of world production.

The immediate effect of a shift in world demand in favor of a country like the United States may be a world shortage of dollars and the consequent inability of some countries which normally have deficits within the dollar area to discharge these deficits by converting surpluses with other areas into dollars. Canada and Belgium are examples of countries whose balance of payments difficulties in the postwar are in large measure traceable to this factor. Europe as a whole normally has a deficit with the United States which is settled by dollars earned largely from the Far East. It is quite possible that countries such as India, Indonesia and Malaya will no longer be important sources of net dollars for Europe in the future. The greater political independence of these countries has been accompained by a desire for rapid industrialization and the inauguration of large-scale development projects. There is considerable evidence that these countries will use their dollar earnings for purchases in the United States rather than transfer them to Europe as was the case before the war.[16]

[16] The prospects of Europe's being able to settle its deficit with the United States by means of a surplus with non-European countries other than the United States is discussed in the United Nations' Report entitled "A Survey of the Economic Situation and Prospects of Europe," p. 69 ff. This Report concludes as follows: "The huge disequilibriums manifested in their (non-European countries) trade with the United States in 1947 is bound to diminish sooner or later. But the demand for imports from the United States, while not capable of being fully satisfied, may well continue to press hard against the available supply of dollar exchange and to leave little over for trade settlements with Europe" (p. 70).

Another structural factor which may contribute to a possible chronic disequilibrium in the postwar period is the heavy dependence of Western Europe on the Western Hemisphere for agricutural products.[17] This dependence has increased with the decline in grain imports from Eastern into Western Europe. To the extent that this decline is the result of physical factors, *i.e.*, shortages of farm equipment, etc., it may be temporary. But there is evidence that political factors may also be responsible for the reduction in exportable surpluses of agricultural commodities by the Russian dominated economies.[18]

While the rest of the world has become increasingly dependent upon United States agricultural products, the technical superiority of United States industrial production makes it difficult for other industrial countries to compete with our manufactured products both in United States and foreign markets. An abundance of capital and superior production techniques, coupled with a large internal market provides an enormous advantage in most fields of industrial production. While it is true that trade takes place in response to differences in comparative costs rather than absolute costs, a country which is continually introducing new techniques which lower costs and is able to introduce new products which capture the fancy of the rest of the world may be able to maintain a more or less permanent competitive advantage. This does not mean that equilibrium could not be restored, but the required adjustments may not be made rapidly enough to compensate for continual changes in the structure of world demand and supply. Finally, mention should be made of the tendency on the part of the United States to make itself independent of raw material imports from outside the Western Hemisphere. The tin smelter on the Texas seaboard and the synthetic rubber plants are evidences of this development. Economic independence in a growing number of fields has become a matter of governmental policy for reasons of national defense. Offsetting these autarchic tendencies is the fact that the United States is rapidly reducing its reserves of some important natural resources, *e.g.*, petroleum, copper, iron ore, lead and zinc.

Means of Correcting International Disequilibrium

In discussing measures for correcting balance-of-payments disequilibrium, we must distinguish between actions undertaken by countries

[17] By 1951, Europe's bread grain production is expected to reach 96 per cent of the prewar level. But to achieve prewar consumption Europe will, according to estimates by the Food and Agriculture Organization, need to import 15.5 million tons of bread grain, annually, or 6 million tons more than prewar. Of this, some 6 to 8 million tons will have to come from the United States. (See *New York Times*, September 3, 1948).

[18] See for example, "Food from Eastern Europe," *The Economist*, for July 17 and July 24, 1948.

unilaterally and those adjustments which need to be taken by several countries in concert. Certain of the deep-seated maladjustments in the world today are not likely to be resolved by unilateral action alone. This is particularly true of structural maladjustments such as those which characterize the postwar European economies. It is for this reason that the ECA is insisting on a cooperative self-help program for the European Recovery Program countries rather than the granting of United States aid on a country-by-country basis. There are, in general, four types of measures which may be taken for the correction of disequilibrium: (1) monetary, fiscal and other economic measures designed to achieve internal economic stability; (2) exchange rate adjustments; (3) bilateral or multilateral trading arrangements; and (4) adjustments in the structure of production.

1. *Measures for Internal Stability*

There can be little doubt that the achievement of internal stability is frequently necessary for the correction of balance-of-payments difficulties on the part of planned, "mixed," and unplanned economics alike. The general level of purchasing power must be related to the volume of consumers' goods, both home-produced and imported, which is made available. In the case of completely controlled economics where the volume of consumers' goods, both imported and home-produced, is directly controlled, an excess of disposable income in the hands of consumers would not directly affect the trade balance. Price inflation and the diversion of rationed commodities to black markets might, however, result in a maldistribution of real income which would seriously impair the living standards and productive capacity of a portion of the population. This result would be an evidence of disequilibrium according to the criteria which we have established above. In mixed and uncontrolled economies, where home investment and foreign trade are partly or wholly determined by private decisions, monetary and fiscal measures will need to be largely relied upon for limiting purchasing power, for encouraging exports, and for determining the volume of savings, investment, and the general level of imports. This does not mean that direct controls can always be dispensed with by uncontrolled economies. Sudden shifts in the trade balance require time to correct by fiscal and monetary measures. Moreover, it may not be possible to reduce total monetary demand sufficiently in the short run to achieve an international balance, without causing great economic hardship and unemployment.

It is frequently said that all a country needs to do to restore international equilibrium is to adopt appropriate monetary and fiscal controls. If by this statement it is meant that a country can apply defla-

tionary measures to the point where its international account is balanced without the aid of external trade controls, no one can dispute it. However, unless certain structural changes take place in the economy, the results of drastic deflationary action may very well be disastrous for production and living standards. Deflationary measures may be prevented from shifting resources to the export industries by price rigidities, or a lack of mobility of labor and other factors of production. Moreover, it may prove impossible for a country to undertake a large investment program under conditions of full employment without at least a certain degree of inflation. This is particularly true where trade unions are able to prevent any downward adjustment of wages and continually press for an increase in existing wage scales.

2. *Exchange Rate Adjustments*[19]

Although a country may not be able to reduce its monetary income and prices by deflation, it can always reduce them in terms of foreign currencies by devaluation.[20] The effect of exchange devaluation on a country's balance of payments will depend upon a number of complex economic and institutional factors including (a) the system of economic controls in the economy; (b) the demand and supply elasticities of the commodities and services entering into the balance of payments of the country in question; (c) the capacity of the country to make the adjustments in the structure of its productive facilities in response to alterations in external and internal cost-price relationships; and (d) the repercussions of devaluation upon the trade and exchange policies of other countries.

a. *The system of economic controls.* In an economy in which all imports are rigidly controlled and exportable surpluses determined by allocation, the chief function of the exchange rate may be that of influencing the demand for exports. (It may not even have this function in a state controlled economy which prices its exports independently of domestic costs.) In economies in which export demand is permitted to compete with domestic demand, the rate will influence the volume of commodities directed to the export market. This fact is frequently overlooked by those who claim that devaluation cannot improve the balance of payments because the country in question is having no

[19] For excellent discussions of the effects of exchange rate adjustments upon the balance of payments see Howard S. Ellis, "The Dollar Shortage in Theory and Fact," *Canadian Jour. Econ. and Pol. Sci.*, Vol. 14, No. 3 (Aug., 1948) pp. 301-11; and Lloyd A. Metzler, "The Theory of International Trade," in *A Survey of Contemporary Economics,* edited by Howard S. Ellis, (Blakiston, 1948), pp. 210-54.

[20] This is true only in the short run. Over a longer period, the initial reduction in prices in terms of foreign currencies may be offset by an increase in domestic prices brought about by the devaluation, or by competitive depreciation on the part of other countries.

difficulty in selling its exportable surpluses. The latter argument is intelligible only if it is assumed that a further diversion of resources to the export industries will reduce consumption standards to an intolerable level or prevent the making of capital investments which are necessary for the eventual restoration of equilibrium.

Where imports are rigidly controlled, devaluation will not reduce imports unless import prices rise sufficiently to reduce demand below existing import quotas. Also where only unessential imports are limited by direct controls, devaluation may fail to reduce imports if the demand for essential imports is quite inelastic. The rise in the domestic prices of imports may, however, be significant for the restoration of the balance of payments, since consumer demand may be diverted from the products of home industry, thereby releasing additional resources for the export industries. Whether or not devaluation is inflationary depends upon the wage policy, the fiscal and monetary policies, and the amount of latent inflation already present in the economy. Thus the argument that for a country which controls its imports by direct means and has no difficulty in selling its exports devaluation is merely inflationary and will not improve the trade balance, needs to be re-examined.

b. *Demand and supply elasticities.* Recent statistical estimates of the demand for imports in various countries have revealed remarkably low price elasticities.[21] It has also been shown that the elasticity of world demand for the total exports of most countries is substantially less than unity.[22] Great care must be exercised in drawing conclusions from these statistically derived estimates of import demand elasticities as regards the effects of exchange rate adjustments on the trade balance. Although in the short run at least, the demand for a nation's

[21] See T. C. Chang, "International Comparison of Demand for Imports," *Rev. Econ. Studies*, Vol. XIII (2), No. 34, pp. 53-67. In this article Dr. Chang estimates the price elasticities of import demand for the United Kingdom and the United States for the interwar period to be —0.28 and —0.97 respectively; see also Randall Hinshaw, "American Prosperity and the British Balance of Payments Problem," *Rev. of Econ. Stat.*, Feb., 1945.

[22] See, for example, T. C. Chang, "A Statistical Note on World Demand for Exports," *Rev. of Econ. and Stat.*, Vol. XXX, No. 2 (May, 1948), pp. 106-16. Dr. Chang shows that for the interwar period the sum of the elasticities of home and foreign demand was for most countries close to unity. In a few countries this critical value was above unity but for the United Kingdom, for example, it was —0.68. In an unpublished paper Dr. Randall Hinshaw points out that since most statistically derived estimates of the elasticity of demand assume a constant level of real income, *i.e.*, the level of income is held constant by means of partial correlation, the effects of the fall in real income in a depreciating country are ignored. The fall in real income resulting from the rise in domestic prices of internationally traded commodities will tend to shift the demand curve for imports to the left. Thus it is quite possible for a country's over-all demand for imports, at a given level of real income, to be inelastic with respect to price and, at the same time, for depreciation to be accompanied by a reduction in the domestic (as well as the foreign currency) value of imports.

imports may be largely determined by the structure of its production and trade and by its national income, changes in exchange rates are capable of bringing about shifts in the demand for imports and in the supply of exports through changes in real income and other changes which may not be accounted for by estimates of demand elasticities derived from cyclical data.

The existence of short-run inelasticities of demand for *total* imports and for the world demand for the *total* exports of individual countries is by no means conclusive evidence that exchange depreciation cannot improve a country's balance of payments. In the first place the demand for a portion of a country's imports and certain of its commodity exports will undoubtedly prove to be elastic. Even if we assume that the total demand for imports is inelastic, total expenditures for imports in terms of *foreign* currencies must decline with devaluation so long as there is any reduction in the physical quantities imported.[23] If the supply of imports is less than perfectly elastic, there will be a further saving of foreign exchange.

Turning to the demand for the exports of a country, even though total world demand is inelastic, the demand for a portion of its exports will undoubtedly prove to be elastic. The net effect of devaluation will depend upon what happens to the prices of its exports in terms of foreign currencies, *i.e.*, the elasticity of supply of the devaluing country's exports. If devaluation enables the country to reduce the foreign currency prices of those commodities for which the demand is elastic while maintaining the foreign currency prices of those commodities for which the foreign demand is inelastic, its balance-of-payments position will be improved.

It is clear that, in considering the effects of devaluation on a country's balance of payments, we must be concerned not only with demand elasticities for imports and exports but also with supply elasticities and pricing policies.[24] If the supply of those exports for which the demand is inelastic is also inelastic (or if prices in terms of foreign currencies are maintained by private cartels or government control) and if both the supply and the demand for the remaining exports are elastic, devaluation will increase total foreign-exchange receipts from exports. Moreover, it is not necessary to assume that devaluation will reduce a country's terms of trade for all or even the bulk of its trade.

[23] Total expenditures on imports in terms of foreign currencies will decrease with a fall in the exchange rate as long as the elasticity of total demand for imports is greater than zero.

[24] See Joan Robinson, "The Foreign Exchanges," in *Essays in the Theory of Employment*, 2nd ed. (Oxford, 1947), p. 142, n. 1. Mrs. Robinson points out that an improvement in the balance may be achieved by devaluation even where the sum of the elasticities of the demand for exports and the demand for imports is less than unity, provided the supply elasticities for imports and exports are sufficiently small.

c. *The ability to make structural adjustments.* A third important consideration in determining the effects of devaluation concerns the relationship between devaluation and the structure of the economy. A change in internal and external price-cost relationships may be a necessary but not sufficient cause for the restoration of a country's balance of payments. A lack of capital, price and wage rigidities, inadequate incentives for enterprise, or plain inertia may be responsible for the failure of production to respond to changes in cost-price relationship resulting for the alteration or exchange rates. These structural factors are discussed below.

d. *Repercussions of devaluation on other countries.* Exchange rate adjustments as a means of dealing with worldwide equilibrium are limited by the fact that the demand for one country's exports may be elastic only under the assumption that its competitors maintain their exchange rates and export prices. Hence in order not to invite competitive depreciation, which in the case of an inelastic foreign demand would prove to be self-defeating, exchange rate adjustments should not be made on a unilateral and piecemeal basis. The practice of unilateral adjustments may also lead to the use of rates which discriminate as between currencies. Thus, it may be to the advantage of a country to reduce the value of its currency in terms of the currencies of certain countries, *e.g.*, the dollar area, while maintaining its rate *vis-à-vis* other countries. For example, a European country may want to encourage a diversion of its exports from other European countries with inflated currencies to the United States. This situation is undoubtedly responsible for the use of discriminatory rates by Italy and France in 1948.

3. *Discriminatory Arrangements*

When countries are unable to balance their international accounts on a multilateral basis, they may be able to do so on a discriminatory basis. Whether or not a country is able to achieve equilibrium through discrimination depends upon whether it can find an outlet for its exports which will enable it to meet its import requirements. If, for example, the only available source of certain raw materials and capital equipment which a country needs is the United States, bilateral deals with third countries will not secure these materials. Discriminatory arrangements may, however, reduce that country's dollar requirements for other commodities available elsewhere and provide a market for the exports to be traded against them. Where import and export controls are not employed, discrimination may be achieved by the use of discriminatory exchange rates, but similar commodities must be available in the areas from which imports are to be increased, *i.e.*, the elasticity of substitution must be fairly high.

Strictly bilateral arrangements, although better than going without needed imports, have well-known limitations. The larger the area of multilateral trading, the more efficient trade becomes. It may be desirable, therefore, for a group of countries to engage in multilateral trade among themselves while discriminating against other areas.[25] However, potential demand on the part of a group of countries joined together in a multilateral payments system for the exports of another currency area may still be greater than foreign exchange receipts from current transactions. Thus, although the new intra-European clearing arrangement[26] may help to reduce the dependence of the Economic Recovery Program countries for Western Hemisphere commodities by promoting a freer exchange of European commodities, these countries will still need outside assistance for meeting their deficits with other areas.

Do discriminatory arrangements provide a permanent solution to the problem of worldwide disequilibrium? Although an adequate answer to this question would require another article or perhaps a volume, it is my view that such devices should be considered as short-term expedients only. Bilateral or regional multilateral arrangements may meet an immediate need for the restoration of trade which has been hampered by a shortage of generally acceptable means of payment. Regional multilateral payments arrangements may also help to restore equilibrium by providing a large protected market for new industries, the rapid development of which is necessary in order to reduce the dependence of members of the region on other areas with which the region as a whole may be out of balance. But after the structural adjustments have been made and exchange rates established at appropriate levels, these industries should be able to stand on their own feet in competition with those of other regions. Regional multilateral arrangements should eventually be merged with a worldwide multilateral system, although it might be desirable to retain the regional payments structure so that temporary discrimination against the outside world could be instituted in periods of emergency.

4. *Structural Adjustments*

By structual adjustments we mean adjustments in the structure of production and patterns of consumption which are not brought about by one of the three types of measures discussed in the preceding para-

[25] I have discussed this subject in an article entitled "Regional Multilateral Payments Arrangements," *Quart. Jour. Econ.*, Vol. LXII, No. 4 (Aug., 1948), pp. 500-18.; See also Robert W. Bean, "European Multilateral Clearing," *Jour. Pol. Econ.*, Vol. LVI, No. 5 (Oct., 1948), pp. 403-15.

[26] For a discussion of the intra-European payments plan see *Second Report to Congress of the Economic Cooperation Administration*, 1949, pp. 11-15.

graphs. In some cases, the adjustments required for the restoration of equilibrium could be brought about by appropriate internal monetary and fiscal means, but for one reason or another governments may choose not to employ them. In other cases, restoration of equilibrium without severe disruption of the economy may not be possible except by direct or indirect action on the part of the economic authorities to alter the structure of the economy. In other words, internal financial measures, exchange rate adjustments or special trade and payments arrangements may not be sufficient or may not act quickly enough to restore an international balance.

In controlled economies, restoration of equilibrium may require the establishment of new industries, the expansion of old ones or an increase in agriculture output for home consumption or export. It may also mean the contraction or elimination of certain industries. On the consumption side, restoration of equilibrium may require the elimination of certain luxury items such as private automobiles, or a cheapening of housing accommodations to be made available to the public.

In relatively free economies, changes in the structure of production may be achieved by special encouragement to certain industries in the form of low interest loans, free technical assistance or tax concessions. Other industries may be discouraged by discriminatory taxation and other measures which do not require a direct control of industries by the government. Although the government may be able to discourage certain industries by indirect means, it may be impossible to expand other industries except by direct encouragement or promotion. There may be cases where the necessary risk capital is not forthcoming without direct government intervention or where the necessary capital can only be obtained from abroad. The fact that in recent years international loans have been made largely on an intergovernmental basis, has tended to increase governmental responsibility and control in borrowing countries.

The question arises as to why, in the case of relatively free economies, necessary structural changes for the restoration of equilibrium cannot be brought about by internal monetary and fiscal measures and appropriate changes in the exchange rate. The answer is that in some cases equilibrium could be restored without governmental action to affect structural changes but only at the cost of unemployment or drastically reduced living standards. The economic organism of a modern industrial nation simply does not have the flexibility and sensitivity to changes in the pricing mechanism attributed to it by classical international trade theory. The expansion of certain industries and the contraction in others which may be dictated by rapid changes in the balance-of-payments position of a country may not take place with

sufficient speed through the operation of competitive forces in free economies. It requires considerable time to attract private risk capital to new industries especially when adequate incentives for venture capital are lacking. Price and wage rigidities interfere with the transfer of resources from established industries. Moreover, new export industries and industries supplying home needs formerly met by imports often require large amounts of foreign equipment so that the initial result of the structural adjustment may be an increased demand for imports. It may be necessary, therefore, for the government to obtain the necessary financing from abroad. If an attempt were made to force the required structural adjustments solely by means of deflationary financial measures, the result might be immediate unemployment, the disruption of industry and perhaps a permanent lowering of living standards.

The postwar situation in Europe is an example of the need for far-reaching structural adjustments for the restoration of balance-of-payments equilibrium which could not be brought about by internal financial measures alone except at the cost of reducing the living standards of a large part of the population to starvation levels. According to the report of the Economic Commission for Europe,[27] if Europe is to achieve equilibrium in her balance of payments and to restore prewar standards of living it will be necessary to close a balance-of-payments gap of $3.3 billion in terms of 1947 prices. This gap remains in spite of the fact that by the end of 1948 prewar industrial production in most Western European countries had already been exceeded. This deterioration in Europe's balance of payments was in considerable measure a result of the reduction in net investment income and changes in other invisible items. In the case of the United Kingdom, whose total production and volume of exports exceeds prewar levels by a substantial margin, practically all of her balance-of-payments difficulties can be traced to the deterioration of the invisible account.

The expansion in European heavy industry and the other changes in the pattern of production which are necessary for Europe to achieve equilibrium by the end of the four-year recovery period not only require large amounts of foreign capital but also a considerable degree of national and international planning and cooperation. It is unlikely that the steps necessary for the restoration of equilibrium at high levels of production can be brought about solely by exchange-rate adjustments and fiscal and monetary measures within the space of a few years. But, to be successful, structural adjustments must be accompanied by appropriate financial measures and exchange-rate adjustments. They may also require trade and payments arrangements with

[27] "*A Survey of the Economic Situation and Prospects of Europe,*" pp. 76-77.

other countries. For example, in order for the Economic Recovery Program countries to balance their accounts with the Western Hemisphere, they may need to plan their industries in a complementary fashion and promote intra-European trade by a regional multilateral payments arrangement. Such arrangements will for a time at least involve discrimination against the United States. Eventually, however, after the necessary structural adjustments have taken place, these countries may be able to return to multilateral trade on a worldwide basis.

The United States and World Disequilibrium

Before concluding, it may be appropriate to inquire as to the need for structural adjustments on the part of countries with chronic surpluses, *e.g.*, the United States. If the elasticity of demand for United States imports proves in fact to be less than unity, changes in the relative value of the dollar, and reductions in United States tariffs, may not bring about a substantial increase in United States imports. It might be argued that the entire burden of structural adjustments to achieve equilibrium rests with the rest of the world which is experiencing a dollar shortage. On the other hand, many Europeans and some Americans maintain that if we want to have a world in which nondiscriminatory trade and convertible currencies are possible, the problem of the dollar shortage is in part, at least, an American problem.[28] Any attempt to determine whether or not a dollar shortage will continue for an indefinite period in the future would involve the making of long-range estimates of an exceedingly hazardous character. But without predicting our long-run balance-of-payments position we might suggest possible ways in which a reduction in our actual or potential balance-of-payments surplus might be achieved.

If economic and political conditions in the world generally were favorable, the most desirable way of dealing with the dollar problem would be to export large amounts of capital each year, preferably on private account. Special encouragement could be given to such investment by government guarantee of the transferablity of earnings into dollars or by other forms of insurance and guarantees. Although foreign investment would increase United States receipts on invisible account, several decades of large outpourings of American capital and technical knowledge would most certainly alter our relative position as a supplier of the world's industrial commodities. Moreover, with the exhaustion of our natural resources, our imports of raw materials will tend to increase.

In the absence of an environment favorable to large-scale United

[28] See "Dollars—An American Problem" and "Dollar Shortage Forever," *The Economist*, July 3, 1948 and June 26, 1948 respectively.

States foreign investment, the government might seek to reduce our export surplus by reducing the amount of agricultural products available for export through our agricultural support price and acreage allotment program. We might also place export controls on strategic raw materials or commodities produced from strategic raw materials as a conservation measure. The difficulty with these measures to curtail exports, however, is that we would be doing the world a distinct disservice if alternative sources of supply of these commodities did not exist. Preventing other countries from satisfying their needs for United States commodities is not a realistic solution to the dollar problem.

Measures designed to increase United States imports would be preferable from the standpoint of the world economy. But here we run into the difficulty that the bulk of United States imports takes the form of foodstuffs and crude materials the demand for which is quite inelastic. A large-scale stockpiling program and a conservation program designed to use imported raw materials while conserving our own reserves of mineral wealth would be helpful but probably insufficient as a solution to the problem. The import demand for a large number of manufactured items is undoubtedly quite elastic and in some cases the total market is very large. Foreign sellers might undertake to capture a large segment of the American market for textiles, china, cutlery, and other commodities in the production of which the United States has little or no comparative advantage. But the barriers to entry into the American market on a large scale are not simply matters of prices and tariffs. The development of national markets requires years of nation-wide advertising and the establishment of large marketing organizations. It is difficult for foreign countries producing on a relatively small scale to meet the requirements for nation-wide marketing in this country. Government aid in promoting the sale of foreign products on a large scale, would very likely meet with enormous opposition on the part of the American business community. In fact, substantial inroads by foreign competitors which would require a serious retrenchment on the part of any important American industry is almost certain to be met with a demand for the restriction of imports.

We may conclude that in the absence of large American foreign investment or of a commercial policy which will permit large imports of manufactured goods in competition with American producers, the major part of the burden of correcting world disequilibrium must be borne by the rest of the world. General discrimination against dollar imports is probably inevitable until industrial capacity in the rest of the world is considerably expanded and adequate alternative sources of agricultural products for which the rest of the world is now dependent on the United States are developed.

PRICES, MONEY AND THE DISTRIBUTION OF GOODS IN POSTWAR GERMANY

By HORST MENDERSHAUSEN*

In the summer of 1948, the economy of Western Germany underwent a radical change. The change was brought about by a variety of factors. The monetary reform of the 20th of June and the subsequent abandonment of a large part of price and rationing controls re-established money as an effective instrument of purchasing power, and markets as legal and effective devices of allocation. An abnormally good harvest and increased external aid led to a significant rise of food rations[1] and improved supplies of industrial raw materials. But, above all, there came into existence an economy with legal and functioning markets.[2]

The effect of the monetary and economic measures was impressive. If the Rentenmark of 1923 performed a miracle, the Deutsche Mark of 1948 may be said to have wrought a revolution. Beyond the immediate change in the availability of goods, a significant change in economic relations took place. It was as if money and markets had been invented afresh as reliable media of the division of labor.

During the preceding years there had occurred a genuine regression of economic civilization. Foreign trade had practically ceased and come to be replaced largely by the intake of foreign relief and the outgo of foreign levies. Internal trade had become a most ineffectual system of redistribution by government agencies, overlaid with forms of primeval long-distance trade and local barter, both illegal. Far from

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[1] In the bizonal area, the food ration of the normal adult consumer was raised from 1,575 calories per day in June to 1,980 calories in July. In August, it dropped to 1,830 calories; but it remained above 1,800 calories in the later months of 1948. (OMGUS, *Monthly Report of the Military Governor*, Statistical Annex, XVII, August, 1948, p. 19, and later issues.)

[2] The term "economy with markets" is used here to denote the presence of markets among the legal institutions of the economy. It does not carry any connotation regarding the scope and place of the markets in the economy. "Market economy" (*i.e.*, an economy dominated by markets) and "economy without markets" may be considered speculative extremes. They are theoretical limits to the many combinations of market and non-market patterns of economic life that occupy the full range of economic history.

having been a "market economy" during the 1930's and the war years, the German economy in terms of its legal institutions came close to being an "economy without markets." This regression was as extraordinary to the economic observer as it was painful and bewildering to the people involved in it.

The severe effects of Germany's repressed or stagnant inflation on incentives and production had been widely realized. The index of industrial production in the bizonal area did not reach 50 per cent of 1936 before March, 1948[3]—it was at 51 per cent in the month of currency reform, June, 1948—while the published indexes of other countries, except Japan, reached levels of at least 66 per cent of prewar, generally better than 75 per cent, in 1947.[4] But it is far from certain that an earlier imposition of currency reform and an earlier decontrol of prices and commodity flows alone would have caused an earlier and better recovery. In view of the protracted disorganization of government, social life, and foreign supplies, it may be said that economic recovery was hardly within reach before 1948, and that a policy of rigidly suppressed inflation was not more unsatisfactory than any other policy available during that time. Nor would it be proper to limit one's view to the effects of stagnant inflation on production. The listlessness of the economy was accompanied by a dulling of organized social conflict. Market, government, and social conflict had simultaneously and temporarily fallen into disorganization. When decisions were taken to reorganize the economy and the government, the stage was set for progress and for more acute social conflicts.

The economic experience of Germany in the three years since V-E Day contains interesting lessons in the reaction of a modern Western nation to severe economic disorganization. Features of general significance are of course inextricably interwoven with the peculiar facts of post-Hitler Germany. It would be very difficult to separate these components of the situation.

Tenacity of Price Control

Price control and rationing survived the collapse of the Hitler Reich. In November, 1945, the four-power Allied Control Authority resolved to continue the German price laws and regulations and the local and regional agencies for price control, thus reaffirming earlier actions taken by the various zone commanders. On February 7, 1946, the Coordinating Committee of ACA agreed on a statement of price principles applicable in the four zones of occupied Germany and Berlin.

[3] Two years earlier in June, 1946, it was 34 per cent of 1936. Revised index published in OMGUS, *Monthly Report of the Military Governor*, August, 1948, p. 98.

[4] *Monthly Bulletin of Statistics*, Statistical Office of the United Nations, August, 1948.

This was to remain the basic price policy document for more than two years.

This statement provided for the rigid maintenance of the price stop: "As a rule, on the majority of commodities, prices are to be maintained, for the time being, at the level before occupation. Price increases over the level prevailing on the 9th of May 1945 shall only be permitted as an exception. . . ." The need for such exceptions was to be proven by actual losses, after exhaustion of all methods to eliminate cost increases. The possibilities of price relief were further limited by the stipulation that only "average direct cost of production of the aggregate of products of the firm" should be covered, that not more than "the smallest margin for overhead and profits" should be allowed, and by the consideration that "the cumulative effect of all price increases permitted . . . on the cost of living shall not be so great as to necessitate any adjustment in the present general level of wages."

While these instructions were to guide the German price formation offices in the various zones, the ACA reserved to itself the right to control the prices of the most important basic commodities of industry and agriculture. ACA exercised this function in a most cumbersome and rigid manner.

Within the various occupation zones, the implementation of the price stop policy showed much similarity in form but variation in substance The Russians used the price squeeze as a means of making private business unprofitable. They exempted from German price law the Soviet corporations that they set up in their zone. In the American zone, price policy was dominated by a "hold-the-line" spirit in the absence of any strong business pressure. The French followed an equally rigid approach while the British vacillated between a Treasury approach of curing inflationary pressure by price increases and a political preference for price-wage stability, the result being a somewhat laxer price stop.

With the formation of bipartite Anglo-American economic policy bodies in late 1946, the principle of the price stop was reaffirmed. In a statement on price, wage, and subsidy policy of November 2, 1946, the Bipartite Board declared that "full expression in prices should not be given to the many temporary and abnormal elements in the present cost structure, especially in the basic commodities, and a limited program of temporary subsidies and stringent control generally is recommended for this purpose." The German price authorities, at the bottom of the hierarchy, reflected the combined influence of Allied policy and German popular opinion. Applications for price increases usually faced long delay and much red tape.

The "price stop with exceptions" was maintained in the face of a

tremendous imbalance of spendable money and available goods. In 1947, currency in circulation in the four zones of Germany and Berlin was estimated at about 10 times the amount that circulated in the Reich in 1936—when Hitler imposed the price stop—total currency and deposits at five times the amount of 1936, while the real national income was put at roughly one-half of that of the Reich of 1936.

Legal prices did increase. The cost-of-living index for the U.S. zone gives a picture of the development of certain legal consumer prices. In October, 1945 this index was only 12 per cent above prewar, but in May, 1948 it had risen to 31 per cent above prewar. While the

TABLE I.—COST OF LIVING INDEX FOR BAVARIA, HESSE, AND WUERTTEMBERG-BADEN[a]
(1938=100)

Date	Total Index	Food	Stimulants	Rent	Heat and Light	Apparel Total	New	Miscellaneous
October 1945	112	106	126	100	116	142	151	117
October 1946	125	114	194	100	119	149	161	145
October 1947	126	122	193	100	121	159	174	138
May 1948	131	132	193	100	123	165	183	140

[a] Computed for worker's family of five, bombed out or evacuated. OMGUS, *Report of the Military Governor*, Statistical Annex XVII, July 1948, p. 49.

weighting and the economic significance of the index are subject to strong reservations, it correctly indicates a relatively small rise during the pre-reform period, very small in view of the exceptional conditions of the country.

The development of the cost-of-living index corresponds roughly to that of average hourly earnings in the industries of the U.S. zone, which were subject to an extension of the pre-occupation wage stop. In March, 1948 average hourly earnings were 131 per cent of 1938. Owing to the considerable curtailment of work hours, however, average weekly gross earnings were only 111 per cent of 1938.[5]

The rise of legal or quasi-legal commodity prices was generally greater than that of the cost-of-living index. In 1947, experts of the British and American occupation authorities prepared estimates of wholesale prices approved or "tolerated" by the German price offices in the bizonal area. The study indicated approximate price developments as shown in Table II.

A new index of basic commodity prices in the bizonal area, established in 1948, showed the prices of basic foodstuffs in mid-June 1948

[5] OMGUS, *Report of the Military Governor*, Statistical Annex XVII, July, 1948, p. 10.

as 124 per cent of 1938, those of basic industrial materials, as 155 per cent of 1938.[6]

The group of manufactured consumers' goods showed the greatest rise, a fact that is also borne out by the lead of new wearing apparel and household furnishings in the cost-of-living index. While manufactured consumers' goods, roughly speaking, doubled in price, agricultural and industrial raw material prices increased by 50 per cent or less.

The resulting change in the price structure, that is, the opening of the price scissors between primary and final producers, was largely due to price control. In the absence of price control, the acute postwar shortage of primary agricultural and industrial goods would probably

TABLE II.—ESTIMATED WHOLESALE PRICE INDEXES IN THE BIZONAL AREA IN MAY 1947, AND COMPARABLE U. S. INDEXES
(1938=100)

Products	Bizonal Area	United States[a]
Agricultural products	120 to 125	265
Industrial raw materials and semi-finished products	135 to 145	230
Finished manufactures	190 to 220	177
Producers goods	150 to 180	—
Consumers goods	215 to 240	—

[a] Based on the Bureau of Labor Statistics index of wholesale prices for farm products, raw materials and manufactured products.

have put their prices in the lead. That, at least, was the case in the United States. The disruption of the national market in Germany, the lack of imported raw materials, the destruction of the Ruhr industries and the inaccessibility of Silesian coal and Eastern and Central Germany foodstuffs, all would probably have accentuated this tendency.

Price control in Germany produced the inverse tendency, chiefly for two reasons. Price increases of the basic commodities could only be made by the Allied Control Authority itself. That meant in the first place a very laborious process of fact finding and transmitting and finally a sort of four-power conference on the case in hand. The quadripartite negotiations about British proposals to raise the prices of coal and steel showed all the features of futility that have disgraced four-power conferences in recent years. Added to the prevailing price-stop preference among the representatives of at least three of the four powers, this condition prevented anything like a sufficient price adjustment of most basic commodities. It blocked any action on coal and steel.

[6] Statistical Office of the Bizonal Area: *Statistische Monatszahlen*, November, 1948, 38. See also Table V below.

Costs of production had of course risen greatly through declining labor productivity (in Ruhr coal mining, by 40 per cent), destruction and wear of plant and equipment, shutting off of normal sources of supply (for instance of Swedish ore to the iron industry and of fertilizer to agriculture) and other factors. The stability of basic industrial prices entailed credits *à fonds perdu* to the steel industry and heavy subsidies to coal mining.

The producers of finished goods were better off. They had to deal only with German price controllers whose understaffed offices were expected to spread their efforts over the whole wide field of economic activity, down to the fees for dancing lessons and the admission charges for flea circuses. Products were diversified and less easily controllable. Producers could change their products and come up with something "new" that required fresh price fixing on the basis of actual cost. This was a faster road to price relief than applications for price increases of traditional products. Finally, the producers and traders of these goods could exploit the division and the economic warfare between the zones, sell Soviet zone fever thermometers in Hamburg (British zone) at prices allegedly approved by Soviet zone authorities, and Solingen cutlery in Wuerttemberg (U.S. zone) at prices apparently legal in the British zone.

Price control during the first three years of occupation was surprisingly effective. There was a great deal of evasion; but the bulk of the goods changed hands at legal or nearly legal prices. Legal prices were charged for rationed foodstuffs—which made up more than three-quarters of the "normal" consumers' intake of food—and for the few manufactured consumers' goods that could be obtained on rations or purchase permits; for allocated raw materials and equipment and, as will be seen below, even for producers' goods obtained outside the allocation system. Legal prices governed the sale of all imported agricultural products as well as the bulk of the deliveries of domestic grain and other products. Legal prices were paid for export goods. In addition, legal wages prevailed throughout the economy. Even the fees of artisans and professions remained relatively stable, although to a lesser degree than wages and although extra services usually had to be rendered in return.

It is of course true that the legal prices and rates did not represent the essence of the bargain in many of these transactions. Much more important than the return in money was the preservation of good will or at least tolerance on the part of government authorities, customers or employers, suppliers or workers in a social situation that was full of dangers to liberty and property. Compliance with price control was a form of insurance premium, and there were ways for many businesses

and individuals to make the premium relatively inexpensive.

Most of the violations discovered by the price supervision offices were relatively minor. During 1947, the price authorities of the bizonal area confiscated excess proceeds of 32 million marks in the prosecution of 200,000 cases of price violations.[7] Price increase applications were submitted to the price formation offices in a regular fashion. Usually more than half of the applications submitted in the U.S. zone got some measure of price relief; more than three-quarters, in the British zone.

Thus, in the midst of currency, supply and demand conditions that would certainly have produced price inflation in a market economy, there remained a fairly high degree of price discipline and stability under price control. But the economic incongruity of the situation produced changes in the methods of distribution, a limited black market and a widespread system of reciprocal exchanges of goods and services. These changes took the substance out of the price system and tended to make it a hollow shell.

Limitations of the Black Market

The black market was one of the balance wheels of postwar Germany's disequilibrium system.[8] Its existence could hardly surprise; but its limitation and its stability did. There is no evidence of its spreading during the three years' period, nor is there evidence of general cumulative price movements. The German black market before currency reform may be empirically defined as the purchases and sales for money (or for such money substitutes as cigarettes or coffee) at prices many times as high as the legal level. It comprised a certain section of economic transactions, probably less than 10 per cent of the total by volume. It had its special agents and links to the remaining bulk of economic exchanges.

It is impossible to measure the quantitative importance of black market transactions with any degree of exactitude; but "informed guesses" of Military Government officials allowed to them not more than 5 per cent of imported grains, industrial materials or Army supplies; not more than 10 per cent of German industrial and agricultural production;[9] up to 20 per cent of the imported goods coming

[7] OMGUS, *Report of the Military Governor,* Statistical Annex XI, January, 1948, p. 71. Excess proceeds were confiscated in only 30,000 of the 200,000 cases.

[8] I borrow this term from J. K. Galbraith's article "The Disequilibrium System," *Am. Econ. Rev.,* Vol. XXXVII, No. 3 (June, 1947), pp. 287-302. Galbraith described that system as a combination of comprehensive controls over prices and the use of resources, and a substantial excess of money demand over the supply of goods and services.

[9] One of the outstanding exceptions that has been reported is the disappearance from legal channels of two-thirds of all pigs slaughtered in Bavaria during 1947. OMGUS, *Information Bulletin,* April 20, 1948, p. 12.

into the hands of Allied personnel as their private property (after private importation of cigarettes had been banned); probably 90 per cent of the turnover of existing luxury goods (jewelry, cameras, china, rugs, furniture).[10]

Black market operations consisted primarily of transactions in finished products. They usually involved traders and final consumers, to a lesser extent original producers. The products came partly out of German production (typically bread, potatoes, fats, meat, soap, textiles), partly from Allied sources (typically gasoline, tobacco goods, chocolate, certain foods), partly out of personal and household possessions of the German population. They were handled by black market traders, recruited from the ranks of the displaced persons and Germany's unstable and dislocated population.

The contacts between this class and the rest of the population were manifold. People who knew where to buy or sell "black" goods could be found in nearly every house, especially in the larger cities. Every family was involved, at more or less frequent intervals, in the black market sale of some possessions and the purchase of some "black" foods, stimulants, clothing, etc. Characteristically, the excess of expenditures over income in a sample of 81 Bavarian workers' and white collar households (September, 1947), amounting to about one-third of income, was almost entirely balanced by money receipts from the sale of personal property.

Likewise, all business enterprises would at one time or another make a black market purchase or sale to obtain critical materials or parts and to cover costs and tax bills that could not be met out of legal income. But the great majority of households and businesses considered their involvement in black market transactions as shameful, and the agents of the black market as immoral and asocial individuals.

The prices of the black market varied from place to place and fluctuated in time. Owing to bad transportation and communications and to its illegality it was of course an imperfect market, in which some transactions and some places, especially Berlin, would show much higher prices than others. Information collected by the price supervision offices and the police indicated that in May, 1947 black market prices in the main cities of the U.S. zone were about 100 times or more the legal prices for sugar, butter, coffee, saccharine, flour, ladies' stockings, soap, flints; about 75 times the legal prices of oleomargarine, eggs, liquor; about 50 times the legal prices of potatoes,

[10] OMGUS, *Economic Policies, Programs and Requirements in Occupied Germany; Answers to questions submitted by members of the Select Committee on Foreign Aid, House of Representatives, September, 1947*, p. 149 ff.

beef, Leica cameras; about 25 times the legal prices of coal, suits and dresses, electric bulbs, automobile tires and gasoline; and about 10 times the legal prices of typewriters, and electric wire. The most important black market foodstuffs sold at prices in the range of 50 to 150 times the legal level. As a rule, industrial goods had a smaller black market agio, with the notable exception of ladies' stockings, soap and flints. The average of black market prices may be estimated at 50 to 75 times the legal prices.

At that price level, even a small turnover of goods would absorb a large volume of purchasing power. Assuming that only 8 per cent of the total volume of transactions were carried out at that level, while the remaining 92 per cent were carried out at legal prices, the volume of money engaged in the black market transactions would be about five times as great as that engaged in transactions at legal prices. Allowance for the use of money substitutes might lower this figure somewhat; but the order of magnitude would probably remain similar.

In this fashion, the black market absorbed a considerable part of the excess supply of money in postwar Germany. The remainder of the excess was neutralized by the considerable decline in the velocity of money circulation, compared with prewar, that resulted from a variety of factors: the decline of financial transactions, the regression to cash payment and official sterilization policies. Moreover, the excess did not increase; it possibly even declined with time. The slow advance of production and of legal prices probably exceeded any net infusion of money that may have come from the Soviet zone. The fiscal policies followed in the bizonal area whittled away some of the excess purchasing power after 1945. There factors explain in large part the stability or slightly downward tendency in the black market price level during the three years' period.

The black market was limited to commodity and property transactions. Black market wages commensurate with black market prices were practically unknown. Employees working in establishments with obvious black market incomes as a rule preferred compensation in extra goods to extra money, and the same rule usually applied to irregular employment and odd jobs.

Bilateral Exchange

While Germany's postwar inflation remained stagnant in a setting of rigid price control and a stable black market, the distribution of goods and services underwent an important institutional change. Bilateral exchange assumed major proportions. In a large sector of the economy, goods and services could not be obtained for money alone, nor even for money plus ration coupons or allocation certificates. They could

only be obtained on the condition of delivery of other goods and services.

To most people, money did not lose value by way of depreciation but it lost significance through an increasing limitation of its usefulness. Food rations could be bought at legal prices, but it was the ration card, not the money, that controlled the access to the scanty and irregular distribution of foodstuffs. The amount of money that could actually be spent on the food rations was not hard to find. Pegged wages and an occasional black market sale would put that amount into everybody's hands, even without the benefit of former savings. This held true *a fortiori* for other consumer goods. The quantities of clothing and metal goods available after allotments to refugees, and in the latter part of the period, to miners and other workers' groups, were so small that the opportunities to obtain them for money and permits were negligible. The black market, finally, was narrow and an unreliable source of supply for the commodities of daily living, entirely insufficient to obtain the ingredients of production. A mark might be worth half a cent or half a dollar in relative purchasing power; but in either case there was not much of a point in relying on that purchasing power and in laboring to get hold of the mark.

For reliable supplies, businesses, farmers and workers increasingly turned to bilateral exchange via "compensation trade," "distributions to workers," and regular barter. These practices were illegal under the sweeping prohibitions of nazi wartime legislation, in particular the War Economy Ordinance, which were kept in force under the occupation. But the German and occupation authorities found these breaches of economic controls almost irrepressible. In September, 1947 U.S. Military Government experts believed that from one-third to one-half of all business transactions in the bizonal area proceeded in the form of "compensation trade."[11] "At least 50 per cent," was the guess of German government officials in the Ruhr area. This was an all-pervading feature of the economy.

Apart from the limited usefulness of money, two factors helped to establish bilateralism on a broad scale. First, the occupation authorities led the way. In the early days of occupation, local military commanders obtained essential goods for their district by loading up some trucks with the district's products and taking them to the outside suppliers for straight barter. Throughout the period, the occupation authorities offered a ration-free noon-day meal at the legal price to all of their German employees, from top-level expert to street cleaner. This arrangement was the major and indispensable material attraction of

[11] OMGUS, *Economic Policies, Programs and Requirements in Occupied Germany.*

service in occupation establishments. Likewise, the occupation authorities introduced "incentives in kind" to boost the economic activities judged most important: coal mining and export production. They thereby acknowledged that in order to buy something you have to sell something to the seller.

Second, in the eyes of most people bilateral exchange was far less immoral than black-marketing. It was usually considered an unfortunate necessity. "How can I keep my workers without putting tires on their bicycles? They will take them, anyway," said the rubber manufacturer. "Everybody knows that to get cement you must offer coal," said the city fathers of Stuttgart, and they bought liquor brewed in the surrounding countryside, shipped it to the French zone in exchange for cigarettes, shipped the cigarettes to a Ruhr mine and swapped them for coal, brought the coal back to a cement plant in Wuerttemberg, and thus got the cement for reconstruction work. The monitored correspondence between two businessmen showed the negotiations preceding certain compensation deals. Their illegality was understood. But when one of the parties demanded an unusually large counter-shipment in return for his products, the second party indignantly charged him with "illegal black-marketing."

Money did enter into "compensation" trade, both as an accounting standard and as a means of payment. Typically, the equivalent quantities of goods in these reciprocal transactions were computed with the help of legal or near-legal prices, the common formula being "peace-time value for peace-time value." From the point of view of price control, many of these transactions were inoffensive. But there also were characteristic changes in equivalencies that reflected the incorrectness of the frozen price structure. For instance, the going rate for the widespread bilateral exchange of cement for coal was one ton of coal for one ton of cement. At legal prices, one ton of coal was the equivalent of one-*half* ton of cement. The balance due the cement producer at legal prices would usually be settled in money. That was for bookkeeping purposes chiefly.

"Compensation trade" was the typical form of bilateral exchange among industrial producers and wholesale traders. A considerable part of their effort was spent on locating partners to a deal and in arranging for the expeditions needed to carry goods from one place to another safely. The system was costly and cumbersome, and most businessmen disliked it intensely. But it provided a market mechanism, even to the point of developing some clandestine "bourses," and it helped avoid a complete breakdown of industrial activity under the weight of scarcities and trade prohibitions. It is noteworthy that in the more elaborately planned and policed Soviet zone, compensation trade was

not only rampant but even formalized occasionally. A big chemical plant, appropriated by a Soviet corporation, was known to have a detailed list showing the exchange equivalencies of a hundredweight of fertilizer in terms of coal, flour, potatoes and other goods, for the benefit of its customers.

Bilateralism in the employer-employee relationship took the form of factory meals more substantial than the turned-in ration coupons of the workers warranted, the sale of consumers' goods to the workers at legal prices but without permits, and the granting of facilities and materials to "work shops" in the plant, where the workers could make some articles for their own use on company time or after hours. Naturally favored were the employers producing goods of general usefulness to consumers. But where the production was not suitable, or could not be made so by the addition of special lines, goods for distribution to workers were obtained from other producers through "compensation trade," or the workers were given factory products that could be taken out to the peasants and bartered for food. In this way, even a steel mill could satisfy its workers by giving them Thomas fertilizer and steel bands for the wheels of peasant carts.

The pre-commercial system of *Deputate* (payment in kind) that had lived on in German coal mining and on large agricultural estates thus spread throughout the entire industrial economy, chiefly in the form of the provision of facilities to buy at legal prices what was otherwise unobtainable. The 20th century institution of the works' councils, representatives elected by all the workers of a plant, was frequently made the vehicle of the *Deputat* system. The works councils allotted the goods to workers according to some standard of need and they frequently also participated in the procurement of food for the works kitchens.

Finally, there was the direct barter between city dwellers and peasants. The city people hiked to the villages with an assortment of hardware, textiles, tobacco and personal possessions and bartered them for food. In this trading, money played almost no role at all. City people also worked as farm helpers for the food and whatever living quarters were available in the crowded villages.

The bilateral exchange economy was the chief means of survival for businesses and individuals in Germany before currency reform. It developed in the domestic economy to cope with the same basic problem that bilateralism seeks to meet on an international plane, *i.e.*, unreliability of a complex division of labor. Its German variety represents the extreme stage of a development that could be observed in milder forms in the war and postwar economies of Great Britain and the United States. Where neither trading for money nor redistribution

of goods by political authority, alone or in combination, can ensure a reliable division of labor, bilateral exchange seems to be the safest line of economic retreat.

Monetary Reform and Companion Measures

The monetary reform for the Western Occupation zones, introducing the Deutsche Mark[12] as the new legal currency, was ordered by the three military governments on June 20, 1948. Currency holdings and deposits of D-Marks came into existence by (1) the allotment of certain amounts to consumers, businesses, public authorities and military governments, and (2) the conversion of the old marks.[13] Credit creation soon came to add a third major source of monetary means, and the influx of Western Berlin mark, a fourth and minor source. (See Table III).

The Western zones went into the reform with a money supply estimated at RM 135 billion.[14] On the 7th of September, when the new central bank for the three zones, the Bank Deutscher Laender, gave its first accounting, the economy was equipped with about DM 12 billion on currency and free bank deposits, excluding inter-bank deposits, of which little more than DM 9 billion were created by the reform measures, about DM 3 billion by the bank system through credit creation.[15] Not counting the latter, the money supply was reduced by more than 93 per cent as a result of the reform. These monetary means were to effect the circulation of goods and services at existing or newly forming prices.

It is not intended to give the legal details and a play-by-play account of the currency reform in this article. Regarding its broad economic effects, however, it should be pointed out that the original reduction of money was in effect somewhat more severe than the quoted figures indicate. About DM 1.1 million of the DM 12.3 billion accounted for were nominal accounts and not at the disposal of the economy in September, 1948. Excluding furthermore savings accounts of DM .3 billion, the effective monetary means of the economy were DM 10.9

[12] The basic laws (for the U. S. zone, law No. 61, 62, etc.) have been released by the U. S. Department of the Army, Public Information Division.

[13] Reichsmark, occupation mark, etc. This division simplifies the more complicated measures that were taken. Technically, the allotments were made in the form of 1 to 1 conversions of old mark into new mark. In later conversions of additional old marks, the customers were debited with nine times the originally allotted amounts in old mark.

[14] OMGUS, *The European Recovery Program,* Joint Report of the U.S. and U.K. Military Governors, September 31, 1948. Little more than RM 100 billion were converted. The remainder was not presented for conversion. The currency reform law provided for the investigation of large old mark accounts.

[15] *Mitteilungen der Bank Deutscher Laender,* No. 13, Frankfurt, October 22, 1948, and direct communications from the same source.

billion, or about 22 per cent of the national income. By comparison, in 1938, the monetary means of the German economy were about 34 per cent of the national income.[16] The shortage of monetary means, however, was offset to some unknown extent by an upward spurt of the velocity of money circulation, reflecting the great propensity to buy in the unfolding markets; and it was rapidly alleviated by credit creation on the part of the banks.

Credit creation on the basis of commercial paper or personal confidence proceeded at a fairly rapid pace till November, 1948, when

TABLE III.—VOLUME OF MONEY IN WESTERN GERMANY, DECEMBER 31, 1948*

		DM billion
a. By Type		
D-Mark notes in circulation		6.3
Deposits (excluding inter-bank deposits) with the central banks of the Trizone and the various *Laender:*		11.4
Occupation authorities	.45	
German public authorities	.89	
Others	.22	
Total	1.6	
With other banks	9.8	
Total		17.7
b. By Origin		
Allotments:		6.8
to Occupation authorities	.77	
to German public authorities	2.38	
to businesses, including state railroad and postal system	.76	
to consumers	2.90	
Conversion of Reichsmark		about 5.9
Credit creation		about 4.8
Influx of Berlin B-mark		about .2
Total		17.7

* Source: Bank Deutscher Laender.

measures were taken to check it. The composition of the volume of money by type and by origin at the end of the year 1948 is shown in Table III.

Monetary reform was accompanied by several measures in the field of taxation (the "little tax reform"). The occupation authorities reduced the very high income and property taxes in effect since 1946 by lowering rates and raising exemptions. The corporate income tax was

[16] Money: RM 29.1 billion, national income: RM 85 billion. If savings deposits are included in both years, monetary means amounted to 66 per cent of national income in 1938, 22.5 per cent in September, 1948.

made less progressive. On the other hand, a new high excise tax was imposed on coffee, and local taxes were raised considerably. Contrary to previous plans, however, no action was taken to settle the vast and thorny issue of the "equalization of war and postwar burdens." The occupation powers assigned this task to the German authorities, and the latter have not succeeded so far in finding a solution acceptable to Allied policy makers.

An important companion measure was the adoption of a uniform link between the D-Mark and the dollar, the $.30 conversion rate. During the year following currency reform this rate gradually replaced the many different "conversion factors" that previously had linked German to foreign prices in export and import transactions.

Fiscal and Economic Policy Pattern since Reform

The development of the Western German economy after monetary reform may be divided into several phases: (1) a brief release phase from the perverted institutions of the war and defeat economy, during which dishoarding dominated the scene; (2) an inflationary recovery phase during which the economy under slack controls advanced toward better performance and produced inflationary tensions. At the time of writing (March, 1949), the German economy seems to have entered a slight recession that may lead to the end of the decontrol period.

A discussion of the price and market developments during the first six months after currency reform presupposes some comment on the shape of fiscal and economic policy pursued by the Allied occupation authorities and the tentative German authorities, whose complicated interaction governed Western Germany during that time.

The German credit system was reactivated by the military governments in a rather quaint form. The central bank system was made irresponsible to political authority, in particular to the central authority that is slowly emerging from the bizonal institutions. In the name of "nonpolitical" finance, the Bank Deutscher Laender was put under the control of provincial political, banking and business interests, and credit policy was placed outside the reach of government. Reflecting an extreme distrust of the economic sensibility of public authority and an inclination to see in government the only conceivable source of monetary maladjustment, the occupation authorities outlawed "fiscal sin": "Expenditures of public authorities must be covered by current income. The procurement of funds by means of credit shall be lawful only in anticipation of future revenues. Military Government reserves to itself the right to intervene in budgetary matters if the maintenance of this principle is imperilled." (Article 28 of the Military Governments'

Conversion Law, promulgated as Law No. 63 in the U.S. Zone in June 1948.)

Put against the background of Western economic experience during the last 20 years, this rigid approach to fiscal policy appears like the ghost that Keynes laid. Its return to Germany has not yet had a chance to produce major social-economic disturbance; but it has not failed to leave characteristic marks on the recovery process of the country since currency reform.

Banking control of the credit volume proved by no means a safeguard against inflation and misdirection of resources. During the first six months of the new system, the commercial banks produced a sufficient amount of short-term credit to sustain a considerable upward movement of commodity prices (see below). Private businesses made extensive use of short-term credits for productive and unproductive purposes, frequently tying up the funds for long periods of time; and whatever power the banks had to influence the use of credit was offset by the wave of cash income that accompanied the liquidation of hoards. In November, 1948, the central bank felt compelled to restrict credit. It chose the means of raising reserve requirements by 50 per cent and freezing the aggregate amount of credit outstanding. The rediscount rate was left at 5 per cent.

The subsequent deflationary pressure was exercised with a similar lack of economic discrimination. What discrimination can be discovered was in favor of those who were indebted to the banks and against new customers or projects. The experience indicated the familiar difficulties of shaping and stabilizing the economic process by relying chiefly on banking measures of one kind or another. These difficulties were increased by the lack of balance between the regional and industrial components of the German economy on the one hand, and on the other hand by the extensive use of cash in business transactions that were meant to escape taxation under existing or expected laws (equalization of war burdens).

Long-term development credit was neglected. The commercial banks concentrated on short-term business. Thus, the weight of credit scarcity fell heavily on new enterprise, in particular such enterprise as could not be financed out of the sale of hoarded goods. It also fell on housing construction, where scarce and expensive credit delayed the removal of one of the narrowest bottlenecks in the German economy, the immobility of labor caused by the lack of housing. A public Reconstruction Loan Corporation was established in October, 1948 to finance long-term projects; but the search for sufficient funds proved very difficult, partly for expected reasons (high spending in all quarters), partly for unexpected reasons (the lack of reserves in the import

counterpart fund). The Corporation remained inactive until April 1949. At that time, a credit program was adopted permitting the application of the Military Government's import counterpart fund to investments in electric power and mining development. No funds were provided for housing.

By barring the German governments from the levers of central bank credit, the occupation authorities severely limited their power to contribute to long-term financing and to the relief of continual (social security) and temporary (unemployment) social needs. These needs are great and varied in the present and in the foreseeable future, the most urgent one being settlement of millions of refugees and immigrants and their economic recovery. Operating under injunction to break even, the households of the eight land governments of the bizonal areas nevertheless showed a deficit of more than DM ½ billion in the second half of 1948, which was met chiefly by drawing down the original allotments of D-Mark.

The problem of the allocation of power over credit is of course tied to the general problem of saving and investment in the economy. It is easy to see that the issue of "thrift *vs.* extravagance" cannot be met simply by putting strings on the government's purse. It is harder to ensure a sufficiently high volume of savings in a socially acceptable form under the circumstances prevailing in Germany. To this basic problem, inflationary recovery under slack controls has not provided an answer. The volume of savings that is currently expected even on most optimistic assumptions, falls far short of estimates of necessary capital formation for essential purposes (DM 6.6 billion for 1949-50). Profit accumulation in many lines of business has been considerable since currency reform; but part of it has been dissipated in unessential investments and purchases of luxuries. At the present time, the problem of making austerity popular and of directing the savings that are forthcoming to essential uses is unsolved. What began as a nominally noninflationary policy ran into all the social equity problems, if not the economic problems, of inflation because of failure to enforce austerity in a socially acceptable manner.

This failure, however, should not be attributed to a lack of determination on the part of the man who carried the chief executive responsibility for economic policy during the period following monetary reform, Professor Ludwig Erhard, director of the bizonal Office of Economic Administration. Erhard deliberately relied on market forces to enforce greater productivity and savings. It was his policy to make the new markets the vehicle of recovery and to wait for a larger aggregate of income to soften the impact of growing inequality. Within the given difficult setting, lacking power over fiscal policy, and endowed with a

disintegrating and corrupted control machinery, probably no German leadership could have engineered recovery in a less objectionable manner under the circumstances of 1948. But this did not make the economic recovery a social success. The increase of economic inequality between employers and workers, between the native population and the refugees, between the owners of property and goods and the holders of small cash savings put the stamp of inequity on the recovery process and invited irresponsibility and conflict.

Erhard's economic policy may be examined under three headings: (1) re-establishment of markets; (2) slackening of controls; (3) steering of markets.

Re-establishment of Markets

Markets sprang up through the withdrawal of all-comprehensive price, rationing and allocation controls. The extent of this move can be seen in Table IV. Practically all of the listed goods previously had been under allocation and/or rationing and—including the services—under maximum prices, and many of the manufactured articles had practically vanished from the legal markets. Now great hoards of razor blades, kitchen utensils, furniture, bicycles, building materials, home and factory equipment, etc., were disgorged and absorbed by eager buyers.

The re-appearance of legal markets and effective prices was a turbulent process. Prices of the decontrolled commodities ceased to be uniform and stable. Buyers spent their new money freely, held back for fear that the money would give out, spent again when they got more money through conversion or the sale of hoards, bought for fear of rising prices, stopped again under the pressure of lagging incomes from work. The black market was disorganized, at least temporarily, and the new black market that began to form showed a much lower price level than the old. Bilateral exchange went out of existence overnight; but in the fall of 1948 a relapse into the practice was noted in some places.

Slackening of Controls and Price Movements

Not all controls were abolished (see Table IV); but most of those that remained were relaxed by the administration or circumvented by the people. Little was done to provide the crumbling control agencies with new powers or guiding principles. Where controls remained, the black market was permitted to spread and to gain acceptance by the new spirit of "enrichissez-vous." Freed of social opprobrium, it expanded considerably in the field of food distribution.

Two months before currency reform the Anglo-American occupation

authorities permitted coal and basic steel prices to rise. The increases amounted to about two-thirds and one-half, respectively, of previous

TABLE IV.—EXTENT OF DECONTROL, FALL, 1948*

A. *Remaining under Maximum Prices*
- Basic foodstuffs and agricultural products[a]
- Coal and coal products[b]
- Crude oil, liquid fuels from petroleum[b]
- Crude iron and steel and primary output of rolling mills[b]
- Iron ore and scrap[b]
- Non-ferrous and precious metals[b]
- Fertilizers and insecticides[b]
- Insulin and penicillin[b]
- Tobacco and tobacco products[b]
- Rents and leases
- Film rentals and entrance fees
- Certain professional fees and charges
- Rail rates
- Rates for electricity, gas and water
- Public insurance policies
- Trade margins on foreign trade

B. *Remaining under Fixed Minimum and Maximum Prices*
- Agricultural items: grain and products, potatoes, oilseeds, sugar, butter, yeast, farm prices of milk, sugar beets, slaughter cattle
- Rates for inland waterway and long distance truck transport
- Rates for compulsory motor vehicle insurance
- German medicinal tariff

C. *Free of Price Control*
- Fresh fruits and vegetables, game, hone, coffee, tea, spices, wine, cider
- Restaurant meals[a]
- Virtually all manufactured products
- All chemicals except fertilizers and insecticides
- All timber[b] and all wood products
- All paper products
- Textiles and clothing[c]
- Hides, leather and shoes
- Lubricants, greases, wax, paraffin, industrial benzol
- Pitch and products
- Most pharmaceuticals and cosmetics
- Glass and ceramics
- All building materials
- Output of the metal industries beyond the very early stages
- Potash and salt
- Purchase and sale of land and buildings
- Insurance premiums
- Various other public and private fees

* Source: Price Analysis Section, Bipartite Control Office, Frankfurt, Germany.
[a] Remaining under rationing.
[b] Remaining under some form of allocation.
[c] Under a point system of rationing, at retail level.

prices. A few weeks after reform, a further increase of the coal price was accepted, leading to an aggregate rise of about 100 per cent over the level maintained till the 1st of April, 1948. A second steel price

TABLE V.—INDEX NUMBERS OF RAW MATERIAL PRICES, BIZONAL AREA*
(1938=100)

Materials	Middle of June 1948	Middle of October 1948
Basic Foodstuffs		
Rye and wheat	about 101	about 125
Barley and oats	about 101	116
Potatoes	148	166
Sugar	130	130
Oleomargarine	126	126
Butter	169	169
Eggs	106	499[b]
Beef cattle, on hoof	119[a]	170
Pigs	117[a]	161
Weighted average of 15 basic foodstuffs	124	152
Industrial Raw Materials		
Coal (*Steinkohle*)	164	207
Lignite	108	147
Iron	215	215
Copper	261	317
Lead	454	732
Zinc	493	684
Aluminum	96	126
Thomas fertilizer	103	131
Phosphates	164	125
Cotton and cotton yarn	359	359
Wool	174	174
Rayon	138	154
Cattle hides	100	560
Calf skins	100	605
Cellulose	181	248
Bricks	189	230
Cement	132	158
Lumber, cut	143	228
Sulphuric acid	159	223
Gasoline	103	103
Rubber	164	71
Weighted average of 29 industrial raw materials	176	214
General index	155	189

* Statistical Office of the Combined Economic Area: *Statistische Monatszahlen*, Wiesbaden, November 1948, 38.

[a] Excluding subsidies paid in British zone to the end of June, 1948.

[b] A free price; no eggs being available at the legal maximum price that was re-imposed after initial control.

increase proposed by the industry, however, was rejected in view of the economies brought about by the considerable increase in steel production. The controlled prices of nonferrous metals were raised by substantial amounts. In this way, and through the rise of various decon-

TABLE VI.—LEGAL AND BLACK MARKET PRICES IN HAMBURG BEFORE AND AFTER REFORM, 1948*

Commodity	Unit	May 15	June 19	June 30	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15
Rye Bread									
legal	1 kg	.35	.35	.35	.35	.41	.41	.41	.41
black		9.50	16.00	1.15	1.03	1.15	.92	1.06	1.02
U.S. Wheat Flour									
legal	1 kg	.44	.44	.44	.44	n.a.	n.a.	n.a.	n.a.
black		40.00	120.00	3.00	3.00	3.10	3.10	3.20	3.75
White Sugar									
legal	1 kg	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.14
black		40.00	160.00	6.00	5.50	5.00	5.20	5.60	6.65
Butter									
legal	1 kg	3.60	5.12	5.12	5.12	5.12	5.12	5.12	5.12
black		480.00	1000.00	22.00	24.00	23.00	24.00	30.00	39.30
Oleomargarine									
legal	1 kg	1.96	2.44	2.44	2.44	2.44	2.44	2.44	2.44
black		360.00	700.00	14.00	15.00	16.00	15.00	17.50	20.50
Eggs									
legal	each	.13	.13	.35[a]	.40[a]	.60[a]	.65[a]	.90[a]	.30
black		8.00	20.00						.95
Coffee									
legal	1 kg	n.a.	n.a.	n.a.	n.a.	54.00	48.00	56.00	26.12
black		600.00	2000.00	48.00	47.00	45.00	41.00	41.00	39.00
Tea									
legal	1 kg	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
black		900.00	4000.00	80.00	60.00	67.00	66.00	67.00	75.00
German Cigarettes									
legal	each	.16	.16	.16	.16	.16	.16	.16	.10
black		2.00	15.00	.20	.20	.20	.18	.18	.17
American Cigarettes									
legal	each	.30	.30	.30	.30	.30	.30	.30	.25
black		6.00	40.00	.30	.40	.40	.40	.40	.44

* Source: Price Analysis Section, Bipartite Control Office, Frankfurt.

[a] Free price.

trolled prices, the long delayed adjustment of basic industrial prices to cost increases materialized, and since expansion of production generally tended to lower unit costs, their producers found themselves in a more comfortable price position.

The index numbers, published by the Bizonal Statistical Office (Table V) reflect the extent of the price increases of primary products during the first four months after reform.

Upon decontrol, the prices of most finished industrial goods began to rise. The most significant consumer price increases up to the end of 1948, amounting to a doubling or even greater advance over previous prices, occurred with footwear where they reflected in part increased raw material prices, and with textiles where the prices of imported materials had remained unchanged. In view of the urgent need for shoes and wearing apparel in the population, the great price increases and the weakening of rationing controls over these goods caused much public discontent. The pricing of shoes and textiles out of the reach of industrial workers brought "compensation trade" back on the stage. Toward the end of 1948 there were growing signs of producers making deliveries contingent upon counter-deliveries of wearing apparel, and of their offering the goods to the workers, at reduced prices, in place of wage increases.

The prices of basic foodstuffs have been raised since reform by about as much as the prices of industrial materials. The weighted average of 15 basic foodstuffs in Table V increased by 23 per cent, that of 29 industrial materials by 22 per cent. But food prices have not risen proportionately to the advance of decontrolled *finished* industrial goods. As a result of this discrepancy and the weakness of controls, a considerable expansion of the black market for meat and other foodstuffs seems to have taken place. Despite the excellent crop, official bread grain deliveries in the bizonal area, August through November, 1948, were little higher than during the corresponding months of 1947, a very bad crop year, and actually lower than in 1946.[17] Supplies were used to feed poultry and cattle, whose products can be sold profitably on the black market. Black market foodstuffs can be obtained generally and easily from retailers at prices two to five times the legal levels.

The reduced price spread and the apparently larger volume of transactions distinguish the post-reform black market from its predecessor. The transition from one price level to the other can be seen in Table VI, which shows the development of legal and black market prices in Hamburg. The data indicate the liquidation boom of

[17] OMGUS: *Monthly Report of the Military Governor,* Statistical Annex XXII, December, 1948, p. 89.

the old black market in the days before June 20th, and the following sharp adjustment. It will be seen that the black market price for coffee temporarily dipped below the legal price after the latter had been raised by a high excise tax.[18]

A general black market price index has been reported for six towns in Bavaria.

TABLE VII.—INDEX OF BLACK MARKET PRICES IN SIX BAVARIAN TOWNS*
(Average legal retail price = 1)

Year, 1948	
Before currency reform	
May 15	93.3
June 15	127.9
After currency reform	
June 30	3.8
July 27	3.7
August 27	3.7
September 24	4.1
October 1	4.3

* Source: Munich Research Office for Economics, quoted in Bipartite Control Office, Price Analysis Section: *Price and Market Developments*, 33rd Report, October 25, 1948.

Following the ideas of "market splitting" that have attracted some interest among German economists,[19] it has been proposed to abolish the compulsion to deliver the entire production of basic foodstuffs at legal prices, and to replace it by quota deliveries at legal prices (the controlled market) and free sales of production in excess of quotas (the free market.) Such a procedure might help sustain deliveries while maintaining the low cost of the basic food ration. But it has not been adopted, since the German authorities felt unable to administer it. The German authorities would have abolished rationing and price control of foodstuffs altogether, if the occupation authorities had not prohibited such a measure.

As a result of these price movements there occurred a noticeable increase of legal living costs. The bizonal cost of living index advanced from 134 per cent of 1938 in June, 1948 to 144 per cent in December; but this index understates the actual increase that occurred in the transition from legal prices before reform to controlled and uncontrolled official prices after reform, if only for the reason that retailers usually quoted nominal prices to the official price collectors. Any true evalua-

[18] This excise tax, imposed under the "little tax reform" of June, 1948, was reduced later in the year.

[19] One of the clearest formulations can be found in a pamphlet by Professor W. Kromphardt, "Marktspaltung und Kernplanung in der Volkswirtschaft," *Dortmunder Schriften zur Sozialforschung*, No. 3, Hamburg, 1947.

tion of the development of living costs through this period of institutional change would have to allow for the changing volume and price level of the black market. It would probably show an average increase of more than 10 per cent in effective living costs during the second half of 1948.

There was also a noticeable advance of wages during this period. The principle of the general wage stop was maintained after currency reform until the Economic Council resolved to abolish it in October, 1948. But the wage ceiling had been raised shortly before the reform when the Allied authorities permitted wage increases up to 15 per cent of the payrolls involved. These increases were consummated chiefly after the reform and led to a rise of average hourly earnings in industry by 16 per cent from June to December, 1948. Average weekly hours of work increased from 41 to 44, *i.e.*, by 8 per cent, and average weekly earnings by 25 per cent. In December, 1948 the average hourly earnings of industrial workers stood at 141 per cent of 1938.[20] Their rise during the second half of 1948 was greater than that of the official cost of living index (9 per cent), but smaller than that of output per man hour in industry (18 per cent).

Steering of Markets

The development of prices and wages stimulated demands for more effective price controls. The trade unions, in particular, opposed the dissolution of the old price control system and demanded the reestablishment of a central price administration. The demand for stricter price controls, possibly assisted by subsidies, may receive further impetus from the increase of the prices of imported foodstuffs that is likely to follow the application of the 30-cents conversion rate to these imports, scheduled to go into effect on May 1, 1949.[21]

Professor Erhard strongly opposed a revival of governmental price controls. A law against extortionate prices was passed by the bizonal Economic Council to placate the opposition. It made the charging of "obviously excessive prices" a penal offense and put a paper weapon into the hands of a paper enforcement agency. In addition, the bizonal administration undertook to publish lists of "normal prices" and ordered merchants to display them in their stores. These lists may have been no less effective in encouraging price increases up to the "normal" levels than in checking high prices. Producers were encour-

[20] Statistisches Amt des Vereinigten Wirtschaftsgebietes, *Wirtschaft und Statistik,* Vol. 1 (new series), No. 1 (April, 1949), p. 22.

[21] Previously, basic foodstuffs brought in under Military Government programs were sold at legal domestic prices, implying a conversion rate of more than 30 cents to the D-Mark. The same holds true for imported seed, fertilizer and medical supplies.

aged to control the wholesale and retail prices of their products. Finally, a program was initiated to make manufacturers produce consumers' goods, especially textiles, at relatively low prices. This so-called "Everyman" program was based on a study of the British "utility" program; but it lacked the strict rationing and price control features of the latter. Rather than a government program, it represents the advance of industrial recovery into the field of cheap, mass-produced consumers' goods after the market for more expensive goods had shown its limits.

In the main, the Erhard administration relied on productivity increases, competition and relatively scarce credit to stop the upward movement of prices and to forestall broad wage increases. Price declines in early 1949 seem to indicate a success of this policy; but they may also foreshadow the end of the decontrol period. The slack of the economy has been taken up and further progress is likely to demand more effective control policies in the fields of distribution, if not prices.

Through the introduction of a uniform conversion rate, the development of prices in Germany has become of significance for her exports, and German prices in turn have come under the influence of foreign price developments through imports. The linking-up of German and foreign prices still is in an experimental stage, with substantial exports leaving the country under special arrangements implying a cheaper D-Mark, and imports, especially of foodstuffs, coming in on terms of implying a dearer D-Mark. In conjunction with the rise of domestic prices, the 30-cents conversion rate tended to discourage exports of various manufactured goods and caused export interests to demand a 27- or 25-cents rate. A lowering of the conversion rate would of course tend to make imported raw materials and foodstuffs more expensive. The occupation authorities, who have exclusive jurisdiction in this matter, have held on to the 30-cents rate for the time being, exploring the problems and watching the pressures affecting the issue.

Performance of the Economy

The substantial recovery of the Western German economy since mid-1948 is apparent from industrial production and foreign trade statistics. Between June and December, 1948, the bizonal index of industrial production rose from 51 per cent of 1936 (same area) to 78 per cent, that is by 53 per cent. Recovery in the producers' goods industries was on the whole somewhat faster than in the consumers' goods industries, with iron and steel production rising from 30 to 51 per cent of 1936, vehicle construction from 26 to 69 per cent, electrical equipment from 81 to 163 per cent; but the advance of such consumers' goods industries as shoes (from 29 to 75 per cent of 1936) and textiles and clothing (from 36 to 59 per cent) was quite remark-

able too. The ratio of current production to that of 1936 in the same area, however, is no measure of the relative level of industrial supplies available, especially on a *per capita* basis. Considerable changes in the structure of industry and trade and the great population increase in the area, among other things, have held that level much below 80 per cent of 1936.

In the field of foreign trade, the second half of 1948 showed a radical improvement of the volume of intake and outgo and a better share of manufactured products in total exports. The excess of merchandise imports over exports, however, remained the same in absolute amount.

TABLE VIII.—MERCHANDISE TRADE OF THE BIZONAL AREA, IMPORTS AND EXPORTS*
(RM or DM, 000,000 omitted)

Imports	Foodstuffs	Industrial			Total
		Raw Materials	Semi-finished Products	Finished Products	
1936	797.0	967.0	417.0	186.0	2,367.0
First half of 1948, annual rate	1,494.4	470.6	291.0	85.6	2,341.6
Second half of 1948, annual rate	2,115.6	992.4	613.4	224.8	3,986.2
Exports					
1936	57.0	317.0	291.0	2,055.0	2,720.0
First half of 1948, annual rate	54.6	262.4[a]	283.2[b]	368.8	969.0
Second half of 1948, annual rate	42.6	652.4[a]	801.8[b]	1,167.8	2,664.6

* *Monatliche Aussenhandelsstatistik des Vereinigten Wirtschaftsgebietes*, December, 1948. Data include the foreign trade of the U. S. and British sectors of Berlin. 1936 data are estimates of foreign trade activities directly affecting the same area in that year.
[a] Chiefly coal and lumber exports.
[b] More than three-fifths consisting of coke exports.

The progress of the general efficiency of the Western German economy cannot be assessed as easily as the progress of its gross output. On the one hand the economy rests on the props of American and to a lesser extent British aid, amounting to about $1.2 billion currently, on an annual basis. On the other hand, it is subject to the drain of occupation costs, amounting to a total of similar if not slightly higher magnitude,[22] and a certain amount of leakage caused by smug-

[22] For 1947-48, Dr. Eduard Wolf estimated the overt (budgeted) occupation costs, including expenditures for displaced persons, reparations, restitutions and demilitarization, at RM 4.6 billion in the Bizone, RM 5.3 billion in the Trizone. ("Investitionbedarf, Sparvolumen, Zahlungsbilanzausgleich," *Zeitschrift fuer das gesamte Kreditwesen*, October 15, 1948). The current rate of these expenditures was probably lower in early 1949; but it is not likely to have dropped below DM 4 billion, or the equivalent of $1.3 billion.

gling (capital flight)[23] and the lack of coordinated control over the external trade of the French zone. The prospects of the German balance of payments would of course improve if part of the occupation costs came to be treated as invisible exports, and paid for accordingly, as they are in Austria. Without such an arrangement, the bizonal economy still has a long way to go to raise its exports to the target rate of about $3 billion (DM 10 billion) for 1952-53, and to reduce its import surplus, particularly with the dollar area, significantly. Along this way, it must expect to find great external obstacles and small rewards in terms of higher living standards.

The economic efficiency of the incipient Western German state is limited by the decay of the body politic that advanced greatly during the Hitler period and that cannot be considered as checked today. The physical recovery that has taken place has given the German society a new lease on life; but neither the new economic institutions nor the external aid that is fed to the system are bound to produce a healthy and peaceful community. The new markets do not necessarily encourage democracy and there is not enough democratic authority to assure fair trading in the markets. It is too early to say whether the economic and social problems opened up by the reforms and the policies of 1948 will be more tractable than the problems that were solved by them. The present experience only shows that the German economy reacted to strong new stimuli after several years of great disorganization, and it proved once more its capacity to produce.

[23] In a press conference on January 26, 1949, General Clay estimated the loss of foreign exchange through smuggling as $100 to 200 million per year, currently.

The turnover of D-Marks in the Swiss currency markets was reported as DM 1 to 2 million per day at the end of 1948. (*New York Times*, December 27, 1948.) The free exchange rate for the D-Mark on the Zurich market was about $.07 in mid-October, 1948, $.14 in mid-April, 1949.

ANALYSIS OF DISSAVING

By GEORGE KATONA*

The analysis of saving by consumers has traditionally been conducted on rather simple lines. On the aggregate level saving, defined as the difference between personal income and consumer expenditures, was usually expressed by one magnitude, either in billion dollars or in per cents of income. It was assumed that the most important variable determining both the amounts saved and the proportions of income saved is the given income level. Numerous investigations confirmed that years of high personal income were characterized by high saving and years of low income by low saving, occasionally even by net dissaving. According to the most recent estimates of the Commerce Department, consumer expenditures exceeded disposable personal income only during the deepest depression, namely in 1932, 1933, and 1934.

Similar considerations were applied when the analysis was made on the level of individual families. The results of expenditure surveys were presented in one continuum. Amounts saved were ranked from the largest saver to the smallest saver, then to the "zero saver" (whose expenditures equalled his income), then to the smallest dissaver, and finally to the largest dissaver. It was sometimes assumed that the large savers were, on the whole, the high-income people, and the dissavers, the low-income people. The dissavers were considered the unfortunate people who were unable to make ends meet and therefore were compelled to reduce their assets (to consume part of their wealth) or to mortgage their future by borrowing. Not only aggregate and average savings were assumed to increase with income, but it was also thought that the higher the income, the larger will be the proportion of the savers and the smaller the proportion of the dissavers.

Are these assumptions generally valid or do we know of any exceptions? More specifically: Is it always true that when income increases, average rates of saving also increase and the proportions of dissavers decrease? The answer is that in 1946 and 1947, in terms of money income, the opposite happened. This is shown in Table I, in which the aggregate computations of the Commerce Department are presented, together with survey data[1] which show distributions of individual

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[1] The material presented in this article is taken from the Surveys of Consumer Finances, conducted by the Survey Research Center of the University of Michigan for the Board

TABLE I.—TREND OF CONSUMER SAVING, 1945–47

	1945	1946	1947
Aggregate Data[a]		(In billion dollars)	
Personal income after taxes	149	159	174
Personal saving	27	12	9
Saving in per cent of income	18%	7%	5%
Micro-economic Data[b]		(In per cent of all spending units)	
Proportion of positive savers	70	65	64
Proportion of zero savers	13	8	8
Proportion of dissavers	17	27	28
	100	100	100
		(In per cent of aggregate net savings[c])	
Amounts saved by positive savers	115	144	175
Amounts saved by zero savers	0	0	0
Amounts saved by dissavers	−15	−44	−75
	100	100	100

[a] Source: Department of Commerce.

[b] Data taken from Surveys of Consumer Finances conducted by Survey Research Center of the University of Michigan for the Board of Governors of the Federal Reserve System. The first survey was made early in 1946, the second, early in 1947, and the third, early in 1948. Each survey was based on a separate representative sample of consumers in continental United States living in private households.

The consumers were grouped in spending units, defined as all related persons living in the same dwelling who pool their incomes for their major expenditures. There are about 15 per cent more spending units than family units.

The amounts saved or dissaved were determined by asking separate questions about each form of saving (change in bank deposits, life insurance premiums, installment purchases, etc.). Positive savers are the units whose income exceeds their expenditures, dissavers the units whose expenditures exceed their income.

The definition of saving as used in the surveys (see *Federal Reserve Bulletin*, August, 1948, pp. 928–29) is not quite the same as that used by the Commerce Department. The most important differences are that the Commerce Department does and the surveys do not include in the savings schedule depreciation on farms and nonfarm homes, and that the surveys include all insurance premium payments, not only additions to insurance reserves. Therefore, aggregate net savings as computed from the surveys are higher than those computed by the Commerce Department. According to the definitions used by both agencies, purchases of consumer durable goods are considered as expenditures and not savings. Finally, additions to and withdrawals from currency holdings are disregarded in the surveys.

[c] The total amounts of net savings are taken as 100, and the share of positive savers and of dissavers in that total is shown. The table serves to indicate the relation between amounts saved and dissaved in the three years. It must be kept in mind that the base of each of the three columns is different. The amounts of net savings were much smaller in 1947 and 1946 than in 1945.

families. The aggregate figures show only *net* saving, which represents the difference between amounts saved and amounts dissaved, and they

of Governors of the Federal Reserve System. Reports of the surveys, containing a description of the sample, of interviewing methods, of the reliability of findings, as well as of results, appeared in the *Federal Reserve Bulletin* (see the June, July, and August 1947,

"do not reveal the number of families who spend more than they earn."[2]

We find that, in dollars, personal income increased both in 1946 and 1947. Yet in 1946 the proportion of consumer units who dissaved increased considerably and the share of total dissavings in the aggregate net savings increased likewise. In 1947 there was hardly any change in the proportion of savers or dissavers, but the share of total dissavings rose further. The amounts saved by the positive savers remained considerable in both years, although they were much smaller than during the war. These data are presented to form the starting point of the analysis. Since they are expressed in terms of money income and do not show the relation of high or low rates of saving to income, they do not necessarily contradict the general assumptions that were described previously.

The most striking development of the years 1946 and 1947 was the increase in the number of dissavers and in the amounts dissaved. Therefore, the relation of consumer saving to income and to other variables will not be analyzed for all American families, but positive savers—the roughly two-thirds of families who spent less than their income—and dissavers—the over one-fourth of the families who spent more than their income—will be studied separately.

Before beginning with this study, attention must be called to the definition of saving used (see also note to Table I). Addition to liquid asset holdings, life insurance premiums, new investment in houses, businesses and securities, and repayment of debt are considered as amounts saved, and the reverse of these transactions as withdrawals from savings. What is most controversial in this definition is that some housing expenditures (additions to and improvements of homes owned) are treated as saving, and that purchases of consumer durable goods are treated as expenditures. If the former were not considered as additions to the permanent wealth of the consumer, the proportion of savers and the amounts saved would have been smaller during the first postwar years; if the latter were considered as such additions, the reverse would have been the case.

The years 1946 and 1947, that are being studied here, are often called "abnormal" years. They are so considered because they follow

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and the June, July, August, and September 1948 issues). Most of the data presented in this article have not been published previously. The author of this article was in direct charge of the surveys. He wishes to acknowledge his great indebtedness to his collaborators, both in the Survey Research Center and the Division of Research and Statistics of the Federal Reserve Board. Mr. Joseph Clawson was especially helpful in preparing this article. Those who financed, supervised, and contributed to the surveys are, however, not responsible for the conclusions drawn from survey material in this article.

[2] *Midyear Economic Report of the President*, July 1948, by the Council of Economic Advisers (Washington, 1948), p. 7.

the war years in which consumers accumulated huge amounts of liquid assets and abstained from buying durable goods and from repairing and improving their homes. Therefore, the developments of these years are sometimes thought unsuitable for the analysis of relationships between economic variables.

Since it is questionable whether any given years ever present "normal" patterns, this argument points to limitations of short-run, cross-section studies. Naturally such studies need to be supplemented by time-series studies extended over many years. But the reverse statement also holds good. One objective of this paper is to show that the usual aggregative time-series studies need to be supplemented by micro-economic short-run analysis.[3] The other objective is to shed light on certain trends of the recent past which may affect developments in the near future.

Relation of Positive Saving to Income

The analysis of positive saving appears to confirm the traditional views. The higher the income, the larger was the proportion of positive savers and especially the proportion of large positive savers (units who saved over $500) in 1946 and 1947. If in addition to the number of positive savers, the amounts saved by them are also taken into account, as is done in the right-hand side of Table II, the differences are more pronounced. Low-income groups accounted for a very small share of the total amounts of positive saving, while the top 10 per cent of income receivers alone saved about one-half of the amounts saved by all people. The sharply accelerated curve of positive saving in relation to income can be seen in Figure 1.

A similar relationship is obtained if instead of all positive saving the two most important forms of saving are considered. Additions to liquid asset holdings (savings bonds, and savings and checking accounts) and savings usually contracted for many years in advance (life insurance premiums, payments into retirement funds, and repayment of mortgage debt) represented during the last two years the most frequent ways of saving, responsible for most of the amounts saved. Both forms of saving gain in frequency when income increases (Table III, Part A). This relationship becomes more pronounced when large amounts of saving are considered.

This does not mean that positive saving is the function of nothing but the given income level. No detailed analysis of the relationship of posi-

[3] See the author's paper, "Contribution of Psychological Data to Economic Analysis," *Journal of the American Statistical Association*, Vol. 42, pp. 449 ff., 1947, on the relation between aggregate financial data, micro-economic financial data, and attitudinal and motivational data.

tive saving to other factors will be presented here. Yet it may be noted that many of the variables which show a positive correlation to amounts saved are themselves correlated with income (liquid asset holdings, urban or rural residence, occupation, etc.). By studying the influence of these factors on saving within identical income groups, it appears that certain occupational groups (businessmen, business managers, professional people, and farm operators) and people in the middle-age groups saved in 1946 and 1947 a somewhat greater proportion of their income than other occupational groups or younger and older people.

TABLE II.—RELATION OF SAVING AND DISSAVING TO INCOME

Spending Units Ranked According to Their 1947 Money Incomes Before Taxes	Proportion of Spending Units in Each Income Decile Who in 1947[a]				Distribution by Income Deciles of Aggregate Amounts of			
	Saved Any Amount	Dissaved Any Amount	Saved Over $500[c]	Dissaved Over $500[c]	Positive Savings[b] 1947	Positive Savings[b] 1946[d]	Dissavings[b] 1947	Dissavings[b] 1946[d]
Lowest tenth (less than $750)	41%	25%	3%	12%	1%	1%	15%	13%
Second tenth (from $750 to $1200)	53	33	5	7	1	2	6	12
Third tenth (from $1200 to $1700)	60	29	5	11	2	3	7	7
Fourth tenth (from $1700 to $2100)	62	31	12	5	4	4	5	8
Fifth tenth (from $2100 to $2550)	68	27	20	8	5	5	6	13
Sixth tenth (from $2550 to $3000)	69	30	20	12	6	6	11	11
Seventh tenth (from $3000 to $3500)	69	30	28	12	7	8	10	11
Eighth tenth (from $3500 to $4200)	64	33	30	16	8	12	10	7
Ninth tenth (from $4200 to $5700)	73	27	42	13	14	15	11	12
Highest tenth (over $5700)	82	17	65	13	52	44	19	6
All Groups	64	28	23	11	100	100	100	100

[a] The data indicate, for instance, that among the 10 per cent of spending units who had the lowest incomes in 1947 (whose income before taxes was less than $750) 41 per cent saved some money, 3 per cent saved over $500, 25 per cent dissaved, and 12 per cent dissaved over $500.

[b] The total of dollar amounts saved by all positive savers, and the total of dollar amounts dissaved by all dissavers, are taken as 100 per cent; the share of the units in each income decile in these totals is shown.

[c] Large positive and large negative savers are defined here as spending units who saved (dissaved) $500 or more. This definition is used, in preference to defining large savers as units saving a high proportion of their income, because of the importance of large amounts saved and dissaved for the entire economy.

[d] Positive savings and dissavings in 1946 are related to income in 1946. The presentation of other data for the year 1946 is omitted; the proportion of spending units in each income decile who saved or dissaved in 1946 shows a similar trend as the proportion who saved or dissaved in 1947.

Relation of Dissaving to Income

The analysis of dissaving will be carried out in greater detail because dissaving in its relation to income, as well as to other factors, does not present a picture that is the reverse of that of positive saving. First of all, dissaving was unevenly distributed in the various income groups. The statement "the lower the income, the larger the proportion of dissavers," was not confirmed in either 1946 or 1947. Most of the differences in the proportion of units in each income decile who dissaved are so small (Table II) as to be not significant statistically. Only in the

TABLE III.—RELATION OF THE MOST IMPORTANT FORMS OF SAVING AND DISSAVING TO INCOME, 1947

A. Forms of Positive Saving[a]

1947 Money Income before Taxes	Proportion of spending units in each income group who: Increased liquid asset holdings by[b]		Saved in contractual forms[c]	
	Any Amount	Over $500	Any Amount	Over $500
Under $1,000	12%	2%	45%	1%
$1,000–1,999	20	4	66	2
$2,000–2,999	26	6	84	5
$3,000–3,999	31	11	90	9
$4,000–4,999	33	15	90	15
$5,000–7,499	38	24	90	26
$7,500 & over	46	37	89	53
All Groups	26	10	77	10

B. Forms of Dissaving[a]

1947 Money Income before Taxes	Proportion of spending units in each income group who: Decreased liquid asset holdings by		Borrowed money[d]	
	Any Amount	Over $500	Any Amount	Over $500
Under $1,000	19%	8%	10%	1%
$1,000–1,999	29	8	17	2
$2,000–2,999	35	11	23	4
$3,000–3,999	38	17	24	7
$4,000–4,999	40	22	23	6
$5,000–7,499	40	25	19	6
$7,500 & over	29	21	11	7
All Groups	33	14	19	4

[a] Spending units who increased their liquid asset holdings and who saved in contractual forms are not necessarily positive savers. Units who reduced their liquid asset holdings and who borrowed are not necessarily dissavers. Some few of the former dissaved through selling houses, businesses or securities. Some of the latter used the money they borrowed or withdrew from liquid assets for investment purposes.

[b] Liquid asset holdings include U. S. Savings Bonds and savings and checking accounts with banks, loan associations, credit unions, and postal savings.

[c] Premium payments on life insurance, payments into retirement funds, and repayments of mortgage debt.

[d] Amounts borrowed on installment and from banks, credit unions, and loan companies. Borrowing money by taking out a mortgage on a newly purchased (or built) house is not included.

highest income decile did the proportion of dissavers drop significantly in 1947, but even this finding is contradicted if large dissavers, instead of all dissavers, are considered.

Similarly, the share of consumer units belonging to each income decile in the total amounts dissaved shows no regularity whatsoever, again in contrast to positive saving. In 1947—not in 1946—it so happens that the lowest and highest income deciles had the two largest shares in the amounts dissaved. The assumption that "the higher the income, the smaller the amounts dissaved" appears to be contradicted.

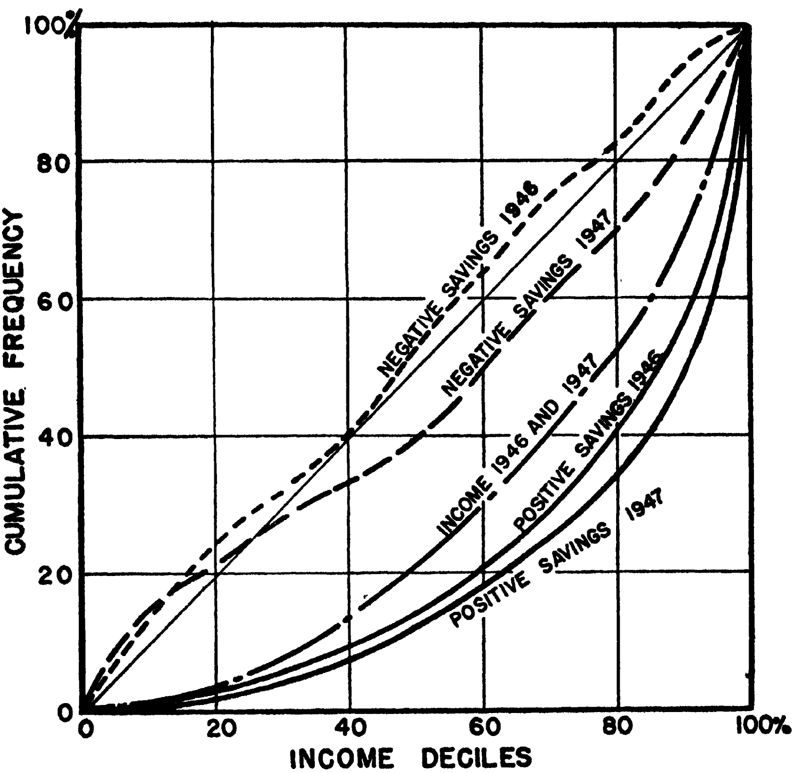

FIGURE 1. DISTRIBUTION OF INCOME RECEIVED AND AMOUNTS OF POSITIVE AND NEGATIVE SAVINGS BY INCOME DECILES

When, for 1946 and 1947, the amounts dissaved are ranked by the income of the dissavers, the curves are on both sides and close to the line drawn at an angle of 45 degrees (Figure 1), indicating the absence of any marked relationship of either high or low incomes to amounts dissaved.

Dissaving has likewise many forms, some of which were relatively infrequent in the last two years (for instance, net sale of common stock and of real estate, liquidation of business investments). In only two

ways did many families dissave, namely, by reducing their liquid asset holdings and by borrowing. Both forms of dissaving show an irregular relationship to income (Table III, Part B). Consumer borrowing was most frequent in the middle income groups. Large borrowing (over $500) and also withdrawals from liquid assets appear to increase with income, that is, behave in a way similar to positive saving.

Kinds of Dissaving

In view of these results, it appears necessary to make a new start in the analysis of dissaving. Suppose we abandon the assumption that income level is connected with dissaving; can any other factors be found which may contribute to the explanation of the phenomenon of dissaving? After several attempts governed by economic as well as psychological hypotheses, and after setting up the questionnaire for the 1948 Survey of Consumer Finances in a way that was suitable to investigate certain assumptions, five variables were selected for testing their relation to dissaving.

The first of these variables (see Table IV) is the statement of the head of the consumer unit that he had unusual expenses due to illness or emergencies. The second is the unemployed or retired status of the head of the unit. Thirdly, decline in income was taken into account. The test of the relation between this factor and dissaving was conducted in two steps, once with respect to income declines which, subjectively, were considered temporary and once with respect to all other instances of income decline. Finally, purchases of consumer durable goods, and especially large purchases of such goods, were thought to be related to dissaving because such purchases were frequently financed through drawing on previously accumulated assets or by borrowing, and not out of income.

It may be mentioned at this point that one further variable was investigated concerning its relation to dissaving. This is the amount of liquid asset holdings, the size of U.S. Savings Bonds and savings and checking accounts held (at the beginning of the year). It was found that, of the spending units who had no liquid assets, relatively few dissaved. Naturally, they could not reduce their liquid assets and it appears that most of them also did not, and possibly could not, borrow. But in comparing the holders of small amounts of liquid assets with the holders of large amounts, no significant differences were found in the frequency of dissaving.[4] Therefore, liquid asset holdings were not

[4] This negative finding may form the starting point of a study of the relationship of liquid as well as other assets to both dissaving and positive saving. Possibly different results would be obtained if owners of large assets were split into two or more meaningful groups.

TABLE IV.—TEST OF THE RELATION OF SAVING AND DISSAVING TO FIVE SELECTED VARIABLES, 1947

Variables	Percentage distribution of spending units who:			
	Saved		Dissaved	
	Any Amount	Over $500	Any Amount	Over $500
Illness, emergency	25	22	32	33
Unemployment, retirement	8	5	10	12
Temporary income decline	4	4	10	10
Other income decline	13	11	15	19
Large purchase of durable goods	12	19	27	41
Total	62	61	94	115
Proportion associated with the 5 variables (excluding duplications)	48	47	68	79
Proportion not associated with the 5 variables	52	53	32	21
	100	100	100	100

NOTE: All spending units who saved (who saved over $500, who dissaved, and who dissaved over $500) are taken as 100 per cent. The frequency of occurrence of each of the five variables is shown for the four groups. The frequency of the five variables among units whose expenditures were equal to their incomes (zero savers) is not shown.

Definitions: *Illness, emergency*. The heads of each spending unit were asked the following question: "Did anything unusual happen in 1947 to influence your savings? For instance, were there any large expenses for such things as illness, moving, or contributions for the support of others; or were your expenses unusually low for some reason?" All those who in answering this question referred to medical expenses, hospital expenses, child birth and death were put in this group. These were altogether 26 per cent of the nation's spending units.

Unemployment, retirement. This group—10 per cent of all spending units—consists of units the heads of which gave as their occupation at the time of the interview that they were unemployed or retired. Housewives who were heads of spending units are not included.

Temporary income decline. All spending units who had a lower income in 1947 than in 1946 and who expressed the opinion that in 1948 their income would be higher than in 1947. Lower and higher were defined as a difference of at least 5 per cent. Six per cent of the nation's spending units had temporary income declines, as defined.

Other income decline. Spending units whose income declined from 1946 to 1947 by at least 5 per cent and who are not included in the previous group. This group consists of 13 per cent of all spending units.

Large purchase of durable goods. Spending units who purchased automobiles or other selected consumer durable goods for at least $500 in 1947. The trade-in value of old cars was not included in the purchase price. Fifteen per cent of all spending units made such purchases.

included in the test, the results of which are presented in Table IV.

To answer the question whether a given variable is associated with dissaving, the frequency of its occurrence among dissavers will be compared with its frequency among positive savers. As a sort of rule of thumb, it may be assumed that a variable which occurred at least twice

as frequently among dissavers as among savers, and twice as frequently among large dissavers as among large savers, is one which greatly differentiates between the two kinds of saving behavior. Temporary income declines and large purchases of durable goods qualify in this respect. The other three factors show a much less pronounced association with dissaving. Relatively many retired and unemployed people saved small amounts in 1947, and relatively many who had illnesses or emergencies or who suffered an income decline (which they did not consider temporary) saved small as well as large amounts.

The upper part of Table IV contains "duplications." Some consumer units, for instance, had both emergencies and a decline in income, and some bought durable goods in spite of a decline in their income. When such duplications are eliminated, it appears that the five factors together accounted for a much higher proportion of dissavers than of savers. Taken together, the five factors were associated with 68 per cent of all those who dissaved in 1947 and as much as 79 per cent of those who dissaved more than $500. This means that it is possible to characterize a very large group of dissavers with the help of the variables listed in the table. It does not follow, however, that no other variables are related to dissaving. The present analysis is intended to represent a step forward in separating different groups of dissavers from each other, but is by no means the final step.

It was not possible to determine the extent to which price increases that had occurred in 1947 contributed to the relatively great frequency of dissaving in that year. But in the light of data presented in Table IV, it appears that some or much of that year's dissaving was not clearly connected with the price increases. Undoubtedly, families whose money income declined were those who were most affected by the price increases. Among all spending units in the nation, 19 per cent had a decline in income in 1947, among savers 17 per cent, and among dissavers 25 per cent. The differences are not very pronounced and, more significantly, three-fourths of the dissavers did not have a decline in income.

Having distinguished certain groups of dissavers from each other, we may return to the original problem of their relationship to income. It was shown before that the frequency of all dissavers, considered together, had no clear relation to the size of their income. This statement, however, need not be true for groups of dissavers that are considered separately. In Table V, therefore, the relation of three groups of dissavers, and of three groups of large dissavers, to income is investigated.

When we consider dissavers who had an illness, an emergency, or were retired or unemployed, it is found that they were most frequent in the lowest income groups. The higher the income, the smaller was

their frequency. A similar, though less pronounced relationship holds good for those who had a decline in income and dissaved. Therefore, for these two important groups of dissavers the original assumption has been confirmed: The higher the income, the smaller is the proportion of dissavers. This statement, originally assumed to hold good of all dissavers applies, however, only to those who dissaved under certain circumstances. There are other dissavers who show the opposite behavior. The higher the income, the larger was the proportion of those

TABLE V.—RELATION OF DIFFERENT GROUPS OF DISSAVERS TO INCOME, 1947

Money Income Before Taxes	Percentage distribution of spending units in each income group who:							
	Dissaved any Amount	Dissaved Over $500	Had Illness, Emergency, Unemployment or Retirement and		Had Income Decline (Temporary or Other) and		Made Large Purchases of Durable Goods and	
			Dissaved any Amount	Dissaved over $500	Dissaved any Amount	Dissaved over $500	Dissaved any Amount	Dissaved over $500
Under $1,000	26	9	16	8	11	5	2	1
$1,000–1,999	31	8	14	5	8	3	4	1
$2,000–2,999	30	10	12	3	7	3	9	5
$3,000–3,999	30	12	11	4	6	3	11	6
$4,000–4,999	30	16	13	7	6	3	13	7
$5,000–7,499	21	12	6	3	4	2	11	6
$7,500 & Over	16	13	5	4	4	4	11	8
All Groups	28	11	12	5	7	3	8	4

NOTE: The data indicate, for instance, that 26 per cent of those in the lowest income group were dissavers; 16 per cent of those in the same group were dissavers and had illness; 11 per cent were dissavers and had a decline in income; 2 per cent were dissavers and made large purchases of durable goods. That 16 plus 11 plus 2 exceed 26 is due to duplications within the sub-groups.

dissavers who spent large amounts for the purchase of durable goods. The resultant of the two contradictory trends is shown in the first two columns of Table V where all dissavers are considered and no clear relationship to income is apparent.

Interpretation and Conclusions

Since an association—for instance, between low income on the one hand and the frequency of dissaving and illness on the other hand—does not indicate a causal relationship, no use was made of the concepts of cause and effect in the presentation of the results. But in the following attempt to interpret the findings and to discuss their conse-

quences, it may be permissible to make use of the more common forms of language. It then appears that dissaving may occur under at least three circumstances (or their combinations):

1. Inability to meet "necessary expenses" out of income.
2. Unwillingness to meet "necessary expenses" out of income.
3. Willingness to make unusual expenditures.

First, there are people who, in a given period of time, are unable to cover their expenses for necessities (or their regular expenses) out of income. This may be the case because of illness or emergencies. It may also be the case because of unemployment or decline in income, and even because of certain purchases of durable goods that are considered inevitably necessary. Under these circumstances, some people will dissave. Not all such people will do so, because in the absence of assets and of credit dissaving is not possible. Furthermore, some people will abstain from dissaving even when in dire need and even though they hold assets. It seems that dissaving, because of inability to make ends meet, occurs more frequently among low- than among high-income people.

Secondly, there are people who under certain circumstances are unwilling to keep their living expenses at the level of their income. Typically, when income declines some people will keep up their standards of expenditure for rent, food, etc., even at the expense of drawing on assets or borrowing. Since dissaving was found to be more closely related to "temporary income declines" than to other income declines, it may be said that this behavior will be especially frequent when those whose income declined expect that their income will rise again. Unwillingness to make ends meet may, of course, also occur among retired people whose income had declined at an earlier date and not during the year in which the rate of saving is determined. In view of inflexible expenditures or obligations assumed at an earlier time, it may sometimes be difficult to distinguish the second instance of dissaving from the first.

Thirdly, there are people who decide to make certain unusual expenditures even though they will then spend more than their income in a given period. Purchases of consumer durable goods are a typical example, but large expenditures for vacation trips, or for clothing or luxuries, may lead to the same result. Dissaving, because of large purchases of durable goods, occurred more frequently among high- than among low-income people. Further investigations revealed one of the factors which contributed in 1946 and 1947 to the relatively great frequency of dissaving due to such purposes. More consumer units whose income increased and more units who expected income increases bought durable goods and dissaved than units whose income declined

and units who did not expect income increases. In other words, dissaving of that type was associated with income increases and with optimistic attitudes.[5]

It must be emphasized that dissaving may have several further forms which were not revealed by the current analysis. Also, the indications given in Table IV about the relative size of the various forms of dissaving in 1947 are suggestive at the best. Better methods used in determining the factors that led individual families to dissave may yield different proportions. But the preliminary analysis that was presented here permits us to draw the following conclusions.

First of all, dissaving must be considered a "short-run" or occasional behavior on the part of individual families. Only in one instance, in case of dissaving due to retirement, will it happen typically that a family would dissave for several consecutive years (when the family lives out of previously accumulated assets). It is, of course, also possible that a family with substantial assets would dissave one year because of the purchase of a car, the next year because of the purchase of furniture, the third year because of the purchase of a refrigerator, etc. But such purchases will more often be spaced over many more years or will occur together in the same year (in the year of marriage or the year in which a house was purchased). Moreover, if the dissaving takes the form of buying durable goods on installment, the next period will be typically one of saving since the installment debt must be repaid. Similarly, dissaving due to income decline will not often repeat itself. A decline of income in two consecutive years will probably lead to readjusting expenditure standards during the second year or will destroy the optimistic outlook of the family.

Preliminary investigations appear to confirm these assumptions. When people who dissaved or drew on their liquid assets in 1946 or 1947 were asked about their saving performance during the preceding year and about what they might be doing during the next year, most of them said that they had saved and will save money. The results are not conclusive because of several shortcomings in the methods used. Nevertheless, the following interesting conclusion may be noted: As shown in Table I, in each of the years 1946 and 1947 more than one-fourth of the American consumer units dissaved; it is conceivable that the proportion of those who dissaved in either of the two years was as high as 50 per cent of all units.

Under what conditions will dissaving be frequent and under what conditions will it be infrequent? One kind of dissaving appears to be

[5] Information on these points and also on the relation of saving and dissaving to income increases and income expectations is contained in the author's article "The Effect of Income Changes on the Rate of Saving," *The Review of Economics and Statistics,* 1949.

a sign of prosperous economic conditions and a factor bringing about such conditions. The higher the income, the more frequent was dissaving due to the purchase of durable goods. Income increases were also associated with such dissaving. Therefore, possibly, the frequency of such dissaving will increase if national income increases. The same might be true with respect to dissaving due to income declines. If the income of a family declines in a year in which most families experience the same fate and national income therefore declines, optimistic income expectations may be infrequent and expenditure standards may be adjusted rather promptly. If, however, the income of a family declines in a prosperous year in contrast to the general trend—19 per cent of the consumer units had lower incomes in 1947 than in 1946—dissaving may be the result in a substantial number of cases.

It is, therefore, not surprising that dissaving was relatively frequent during 1946 and 1947, that is, in years of full employment and high production. The frequent occurrence of dissaving during depression years, as shown by the 1935-1936 Consumer Purchases Study and the Commerce Department tabulations about aggregate personal saving in the early 'thirties, presents, however, new problems. In this respect, it must be recalled that dissaving is not a unitary phenomenon. It is possible that the proportion of families who dissaved is the same in two years, one of which is characterized by high and the other by low business activity, but the functions of dissaving differ greatly in those years. No empirical evidence is available about the kinds of dissaving that are frequent during a depression.[6]

It follows further from the evidence presented in this article that great caution must be exercised in using regression equations expressing the past relation between net saving and income for extrapolating fu-

[6] J. S. *Duesenberry* ("Income-Consumption Relations and Their Implications" in *Essays in Honor of Alvin H. Hansen*, New York, 1948) appears to relate dissaving in 1935-1936 to unemployment and to incomes that were low in comparison to previous incomes. This is possible, but as he himself states, cannot be proved on the basis of data available from the Study of Consumer Purchases. Duesenberry's major thesis that "cyclically, the aggregate propensity to consume depends on the ratio of current income to the highest income previously achieved" (pp. 79 ff.) disregards the possibility of a systematic relationship between income increases and the propensity to consume. Also, Duesenberry's statement is probably too broad; the highest income previously achieved may not affect the propensity to consume under all circumstances and in all future years.

We are, however, in full agreement with the major thesis of another recent paper. George Garvy ("The Role of Dissaving in Economic Analysis," *Jour. Pol. Econ.*, Vol. LVI, No. 5 [Oct., 1948], pp. 416 ff.) writes: "There is no logical reason for relating the motivations of two distinct groups of consumers—positive and negative savers—to the same set of causal factors" (p. 416). But in 1947 we found no confirmation for the following statement made by Garvy: "The presence in the population of relatively large groups of families who have suffered a loss of income accounts probably for the bulk of dissaving" (p. 423).

ture trends. Separate extrapolations of the saving and dissaving curves may present a somewhat better analytical tool because it appears to be justified to consider, in a simple model, positive saving as a function of income. But short-run generalizations ought to be based on the factors contributing to positive saving, to dissaving, and to shifts from the one to the other. The survey method appears to be a suitable tool to collect the information needed,[7] although—and this must be emphasized—the past surveys represent nothing but the start of an analysis of saving behavior. Conducting surveys over many years, adapting survey procedures to the specific objectives of consumer motivation, and using more refined statistical methods (for instance, multiple correlation analysis) may be listed among the requirements of further research.

With respect to the analysis presented in this article, the first requirement looms largest. To what extent are our findings accidental phenomena of the first two postwar years, or phenomena prevailing only in prosperous years? Very little evidence is available to answer that question, especially in view of the possible effects of wartime deferred demand on expenditures in 1946 and 1947. The relationship of dissaving to income must be studied further under different conditions, especially in years in which purchases of consumer durable goods are relatively small. With respect to the possible objection that the analysis was conducted in terms of money income while real income may not have increased in 1946 and in 1947, it may, however, be pointed out that differences in the behavior of upper and lower income groups formed the major source of our conclusions. What is true of differences in the behavior, or of the absence of such differences, of families with high or low money income during the same year applies also to high or low real incomes.

Disregarding theoretical problems, we may attempt to interpret the findings concerning recent past developments. The substantial shift in the consumption-income relation during 1946 and 1947 was accompanied by an increase in the frequency of dissaving. Ability to spend more than one's income was provided by the large liquid asset holdings and the small size of consumer debt outstanding at the end of the war. Willingness to spend more than one's income was provided by the relatively high income level and the optimistic expectations of most families. Some people decided to step up their purchases of goods and services because their income was high and was expected to remain high (and more durable goods became available). Other people de-

[7] This is also the conclusion of R. V. Rosa; see his article, "Use of the Consumption Function in Short-Run Forecasting," *Rev. Econ. and Stat.*, Vol. XXX, No. 2 (May, 1948), p. 100.

cided to keep up their expenditures even though their income declined because they were optimistic about their future incomes and the general economic outlook. There is evidence that desire to save did not decline after the end of the war. But many people expected to be able to fill up their savings again after they had depleted them in 1946 or 1947. Attitudes and behavior of consumers have then contributed to the prosperous economic conditions and to the inflationary pressure that prevailed in the first two postwar years.

THE EFFECTIVENESS OF THE FEDERAL ANTITRUST LAWS: A SYMPOSIUM

Introduction

Dexter Merriam Keezer*

Recently I asked a company of men who have been closely concerned with the development and enforcement of the federal antitrust laws (primarily as economists and lawyers) to check in broad terms my unhappy impression that "these laws have done relatively little since 1890 to protect and preserve a broadly competitive system."[1] I also asked my correspondents to indicate the principal reasons for their views. I did not address my inquiry to anyone currently charged with official responsibility for antitrust law development and enforcement. The purpose was to avoid any shadow of official optimism, or pessimism, about these laws.

In reply to my inquiry I received a set of communications which seem to me to constitute an illuminating symposium on the antitrust laws. Hence, the communications, edited only to the extent of avoiding unnecessary duplication of the same idea or argument, were cast in the symposium which follows.

It will be observed that the contributions to the symposium vary markedly in length, comprehensiveness of treatment, etc. In seeking them I wrote that it was no part of my intention to burden my correspondents "with making a closely analytical and heavily documented statement" but that a brief summary statement of general impressions would be greatly valued. Consequently, when the contributions are more than this they more than fulfill the request to which they were addressed.

Because of the inevitable lack of uniformity in the contributions it was, of course, suggested that it might reflect unfairly upon the participants who wrote briefer or more hurried statements to have them presented in symposium form. This will not be the case, however, if it is kept very clearly in mind, as it should be, that only a simple, informal statement of impressions was required to meet the specifications set. Also, in retaining the informal character of the communications the vitality of the symposium is, I believe, enhanced.

Since no more certainly effective arrangement of their highly diverse subject matter has manifested itself, the contributions to the symposium are

* The organizer of this symposium is director of the department of economics, McGraw-Hill Publishing Co.

[1] In making my inquiry I explained that I did so "as one who would very much like to see the antitrust laws so enforced as to preserve a pervasively competitive system in the United States." I remarked that "such a system seems to me far more compatible with political freedom than any of the alternative systems of concentrated control, either public or private, which has thus far been developed." I added, however, that I was trying "not to confuse my preference with the realities."

presented in the alphabetical order of the names of their authors. At the conclusion of the individual statements, I have appended a few observations designed to emphasize some of the highlights of the discussion. If they do not succeed in fulfilling this purpose I alone am responsible, as each participant in the symposium has responsibility only for his individual contribution, and for a generous willingness to let it appear as a part of a general discussion of the effectiveness of the federal antitrust laws.

Thurman Arnold

Arnold, Fortas and Porter, Washington, D.C.

The antitrust laws have not been effective in the real world. Therefore, the temptation of an academician is to substitute an administration which looks well on paper and compare it with the antitrust laws as they operate. This seems to me very naïve political thinking. My belief is that the only instrument which has a chance to preserve competition in America is antitrust enforcement through the courts. Traditionally we accept the courts as an institution which cannot be criticized or badgered as we badger an administrative bureau. A grand jury investigation can be conducted without public protest in a way that is impossible for an administrative tribunal to function. That is because there is a judge in a robe sitting over it. An administrative tribunal taking drastic action against a powerful political group cannot survive. We have watched the Labor Board swing too far under union pressure and then we see Congress destroying its public prestige and power. Under our tradition and habits you cannot do that to courts.

Theoretically, of course, there are many other ways to preserve a competitive system. You could arrange a tax system to regulate the amount of business which large concerns may profitably do. For instance, Fred Raymond has worked it all out along these lines in a book, which John Chamberlain endorses, entitled "The Limitist." However, my political guess is that we will not depart from the traditional ways of enforcing antitrust laws.

Unfortunately, all antitrust law enforcement under any plan depends on the public attitude. It does not make much difference what your instrument for carrying out antitrust policy is, it will not be effective unless there is a strong demand. There was such a demand when I was in office.[2] Today, in an economy entirely dependent on government spending we are sufficiently prosperous that there is little demand. However, I expect the demand to grow as the consequences of the present centralization of economic power make themselves felt in the business world.

[2] Mr. Arnold was Assistant Attorney General of the United States in charge of antitrust enforcement from March 7, 1938 to March 16, 1943.

Wendell Berge

Posner, Berge, Fox and Arent, Washington, D.C.

The antitrust laws have not stopped the trend toward concentration of economic power, which today is greater than ever. That concentration threatens our continued prosperity and, indeed, the very existence of what we think of as a capitalistic system. It also threatens our free political institutions.

Why have the antitrust laws failed in their basic purpose? In my judgment, it is because we have never really made an "all-out" effort to enforce them. The funds appropriated for antitrust enforcement have never been adequate nor has the enforcement staff ever been equal to the job. Often the will to enforce has been lacking.

I do not think that there is any fundamental weakness in the laws themselves, although, of course, implementing legislation is necessary from time to time. I think that in the Sherman and Clayton Acts we have the legal weapons which could be effectively employed to reverse present monopolistic trends, if we had the will and the resources to use those laws to the utmost.

Is there any reasonable chance that revitalization of antitrust enforcement will become a cornerstone of new national policy? The answer depends, I believe, on the extent to which independent business and the general public become aroused to the acuteness of the problem. The next few years will tell the story. There are some favorable signs, but it is too early to make any confident prediction. If we do not move toward vigorous termination of monopoly power over American industry, it seems to me inevitable that we shall find ourselves in less than another generation with some form of government-controlled and socialized economy.

Arthur R. Burns

Columbia University

Although federal antitrust legislation has been on the books since 1890, there is very little doubt that we have failed to achieve a competitive system at all closely resembling that which was in the minds of the economists of the last century and which provided the background for the legislation. The reasons for this failure lie partly in the forces within the economic system operating in a contrary direction to the legislation and partly to difficulties of achieving competition by law.

The primary pressure away from an organization of industry likely to operate competitively is the industrial technique of production. This technique often requires plants of considerable size for most economical operations. Where considerations affecting the most economical location of industry involve the scattering of plants throughout the country, local monopolies tend to develop from this cause alone. Even in other industries relatively few plants sometimes emerge as a result of efforts toward the most economical scale of operation.

The fact that a considerable part of the costs of industrial production are fixed (the proportion varying widely, however, from industry to industry) permits price-cutting of the short-run type to drive prices down sometimes to the point at which they cover only marginal costs well below average costs. The fact that the industrial technique also involves investments with a considerable physical life means that prices can stay at these levels for considerable periods. However desirable this situation may be in broad economic terms, businessmen, pursuing the profit motive, seek to avoid it. Where they are relatively few, they can pursue their interest by coming to agreements or by price leadership. Alternatively, firms may bring under common control plants at a number of different production points. Thus, the firm may be considerably larger than the plant of the most economical size.

In other circumstances, and particularly in the sale of consumer goods, there is a tendency to turn to the differentiation of products and the use of promotion expenditures, particularly on advertising. Consequently, considerations as to the size of the most economical distributive and promotional organization begin to affect the size of firms and again firms may be larger than the smallest plant capacity capable of production at minimum cost. Thus, there are various forces making for large firms and larger firms mean fewer firms. Tariffs tend to reduce further the number of sellers in industries which are effectively protected from foreign competition.

There has also been a number of forces operating to increase the size of firms by increasing the variety of their activities as well as the scale of their operations in any one activity. The resulting patterns of integration are varied. Vertical integration seems to occur sometimes as a solution to otherwise insoluble problems resulting when at some stage of production there are not only few sellers but also few buyers. During the last twenty-five years the organization of retailing in this country has been passing through a revolution, as a result of which numbers of small retailers have been replaced by large organizations which, in order to be large, are also territorially integrated. But the price competition which resulted at the retail level has brought forth efforts on the part of manufacturers to protect themselves from the direct or indirect pressure of price competition at the retail stage. In some industries such as oil, manufacturers have become integrated through to the retail level. In others, manufacturers have sought (in their own interest, or under pressure from that section of retailers which fears that it is about to be superseded) indirect methods of integration, more particularly through resale price maintenance contracts.

From the point of view of social control, the major question is why a law aiming at the suppression of restraint of trade and monopolies has failed to place an effective barrier in the way of many of the foregoing tendencies generated by the industrial process of production.

The most fundamental reason for the considerable measure of failure of efforts to erect such a barrier lies in the inadequacy of the economic theory underlying the legislation. Theoretically, perfect competition results in the ideal allocation of resources among uses; in a general tendency for costs to cover only the costs of the most efficient firm in the long run, and for full

capacity to be utilized except when the resulting prices fail to cover marginal costs of production. But the theory is internally contradictory in some circumstances. The lowest cost may be achieved only by firms so large that they are too few to behave competitively. A choice must then be made between (1) firms of the most efficient size but operating under conditions where there is inadequate pressure to compel the firms to continue to be efficient and pass on to the consumer the benefits of efficiency and (2) a system in which the firms are numerous enough to be competitive but too small to be efficient. The courts faced with this choice have been either unwilling or unable to decide between the two horns of the dilemma. The dictum in the United States Steel Corporation case that "mere size is no offense" seems to rest upon a choice of efficiency with whatever size it may involve. Irrespective of the facts in the case regarding the most efficient size for the corporation, the court was unwilling to obstruct businessmen in the pursuit of efficiency, whatever the result as to the competitiveness of the market.

Furthermore, had the courts been willing to choose the other horn of the dilemma, namely the maintenance of enough firms to insure competition, they would have faced further difficulties in the solution of which they would not have found economists very helpful. More particularly, the number of firms necessary for the maintenance of competition is a problem that has never been satisfactorily solved, and a firm operating under a ceiling as to size cannot be expected to be fully competitive.

Facing these difficulties, the courts have been unwilling to interfere where they could find plausible reasons for keeping out of complicated difficulties. They have often made their choice as to whether or not to interfere on the basis of a judgment of the motives of businessmen. The reason for this attitude lies largely in the belief that if the market tactics or merger policies under review seem to them to be aimed at the elimination of rivals as a means to attaining a monopoly, or where there is direct evidence of such motive, interference is unlikely to impede efforts to attain efficiency. The fact that some of the prosecutions have been under the criminal clauses of the law tends, for reasons of legal tradition, to place emphasis on the motives of those under indictment. While this policy is not in itself unreasonable, it has two fundamental defects impeding the attainment of competition. First, the determination of motive is extremely difficult and, in actual market situations, may be almost impossible. Second, motive itself is, from the economic point of view, secondary. Those who desire to see the antitrust laws enforced aim ultimately at the maintenance of a competitive structure whether it is threatened by people whose motives are good or bad.

Where oligopoly already exists, economic conditions have not by their nature compelled competitive behavior. The effort to maintain competitive behavior under these conditions seems to be doomed to failure. If businessmen choose price leadership as a means of avoiding price competition, no legal device has yet been discovered by which leadership can be prevented, except perhaps where it is based on collusion. There is no form of decree that can be addressed to a leader by which he can be prevented from being accepted as a leader. It would be more appropriate to address such a decree to

the price followers. But a decree preventing them from charging the same price as the biggest firm in the industry would not be feasible, and might also be rejected as unconstitutional. The same difficulties attend efforts to eliminate basing point systems. The firms in an industry may be ordered to cease and desist from the use of such a system, and possibly the non-base producer may be compelled to adopt a base price of his own. But it is not feasible to determine the height of his base price which, in fact, determines how nearly he remains a non-base producer. The requirement that producers sell to all buyers as a production point at a uniform mill price may eliminate competition by interpenetration of market territories but it remains to be seen whether competition in mill prices will be intensified, whether such prices will be lower than under a basing point system and the extent to which the delivered price of the product may be higher when demand in the vicinity of a producing point exceeds the capacity there. Economists have not been able to suggest any generally acceptable territorial pattern of prices.

Similar difficulties attend efforts to attack another important policy that has emerged from oligopoly, namely the price set and maintained at a stable level for considerable periods of time. Decrees to compel firms to change their prices from time to time are hardly feasible, because of the necessity for prescribing the frequency, and presumably also the amount of change that will comply with the requirements of the court. Here again the economist has been unable to establish criteria which would give the courts confidence in making such decrees.

If the courts do not accept monopoly or oligopoly, they are then faced with the necessity for determining the number of firms to be maintained in order to remove these conditions. In the past, they have from time to time broken up the almost single-firm monopoly but largely because they were persuaded that these monopolies had been achieved, not as the result of a quest for efficiency, but rather in the effort to achieve control of the market. Even so, they have never done more than replace almost unitary monopoly with oligopoly. If they did seek to eliminate oligopoly, they would encounter the difficulties already mentioned concerning the criteria as to the number of firms necessary for competition.

The courts have also been somewhat confused by repeated, and generally truthful, statements by business that it faces considerable competition. The difficulty here lies in the fact that competition or rivalry can take a great variety of forms ranging from the physical destruction of a rival's plant or products to pure price competition. Each of the available types of competition has its own peculiar consequences, some of them varying according to the nature of the industry. Only pure price competition can produce the results which most people have in mind when they defend what they call in general terms "the competitive system." Non-price competition by way of product differentiation and sales promotion operates to increase costs rather than reduce prices. But consumers may benefit to some extent from increased expenditures, particularly on product differentiation or quality competition. Consequently, judgment of these types of competition is extremely difficult. Here again the economist is unable to be very helpful to the court because

typically where an oligopoly engages in product differentiation and service competition, the buyer has no choice as between various combinations of price, quality, service, and the like.

The foregoing does not mean that the antitrust laws have had no effect. It is customary to say that they must have had some preventive effect. The probabilities are that this statement is true, although by its nature it is unprovable. Consequently, no measure of the preventive effect can be available.

The recent modifications of the antitrust laws give considerable general support to the court in its extremely cautious attitude regarding the disturbance of existing business structures and market behavior. The legalization of resale price maintenance provides an opportunity for businessmen to prevent price competition at retail. The court is justified, therefore, in believing that Congress is not determined to maintain price competition wherever it may occur and in this case in the market for consumers goods. State legislation imposing discriminatory taxes on chain stores can be interpreted by the courts as an indication that at least the state legislators are not in all circumstances ready to permit reorganizations of business producing greater efficiency as measured by costs. The Robinson-Patman Act regarding price discrimination rests in the main upon criteria of price discrimination drawn from much economic writing. Here again the courts must realize that this legislation is a part of the struggle between the older and newer organizations in distribution in which the older group sought protection from the state presumably because it was not prepared to rely on the outcome of competition. It is stated, however, that in these circumstances competition is not likely to produce the most desirable results because the very large buyer obtains advantages accruing not only from his cost-reducing opportunities but also from his market-control opportunities. While there may be truth in this statement, it has never been very satisfactorily documented and in practice it is almost impossible to draw a line between the two sources of possible price reduction.

Frank Albert Fetter*

Princeton University

In the tug of war between competition and monopoly in the United States, "the free competitive system" has on the whole, I fear, lost ground, but the end is not yet.

Among the influences tending to make the antitrust laws relatively ineffective are: the fundamental change in the business corporation laws beginning about the time of the passage of the Sherman Act, whereby it became legal for one corporation to acquire and hold the stock of another corporation,

* Dr. Fetter, professor emeritus of political economy at Princeton, died on March 21, 1949. Consequently, his part in this symposium constitutes the last of his many distinguished contributions to scholarly literature on the federal antitrust laws and their enforcement.

thereby pretty effectively defeating the purpose of that act; the approval by the courts of this mode of whittling away and destroying competition definitively in large sectors of the economy; the consequent limitation of the Sherman Act to the prosecution of explicit agreements in restraint of commerce, with the result, as has been repeatedly shown, of putting a premium on absolute merger, the most complete mode of abolishing competition; vague and ambiguous terms in the antitrust laws which, it matters not how they came to be there, have long been an insuperable obstacle to enforcement; the neglect by Congress to seek much needed aid of a technical nature in the framing of economic legislation; the pressure of organized special interests and skilled lobbyists in such legislation; the expenditure by corporations of lavish sums to defeat the enforcement of the antitrust laws, sums much greater than those spent by the government in their enforcement; and the extensive employment of academic economists in defense of monopoly. These are simply the main counts in the explanation of the relative inefficiency of the antitrust laws.

The most noteworthy influences tending to enlarge the possibility of free competition have been the utility investigation in the 'thirties; the holding company act; the creation and operation of the Security Exchange Commission; the more vigorous enforcement of the Sherman Act begun by Thurman Arnold and continued by his successors; the increased insight of the Supreme Court into the economic aspects of the problem; the recent basing point decisions; the activities of the Federal Trade Commission; and the awakened public realization that "a pervasively competitive economic system" is alone compatible in the long run with political freedom. This proposition is at least given lip service by many who still are striving to retain and increase monopoly control in their own industries, and thus are helping to dig the grave of a truly democratic capitalism.

We are listening to a great deal of naïve hypocrisy about the need to preserve our perfect system of free competition. Concentrated control has already gone far and is going farther.

Theodore J. Kreps

Stanford University

I am disposed on balance to agree that the antitrust laws, as interpreted and enforced, have neither stopped business aggrandizement nor preserved, in so far as it existed, a "broadly competitive system." I doubt whether by themselves they could have done so, even had they been fully enforced. It is certain that the amount of monopoly, whatever that may mean, is not less now than in 1890.

The antitrust laws probably have had more of a prophylactic than a remedial effect. The onward sweep of technological agglomeration has not been delayed. To avoid the risk and cost of antitrust litigation businessmen may, on occasion, have reluctantly dropped or modified highly cherished

plans or operations. No doubt the extra ingenuity required to revise old methods or devise new ones has been irksome. Even when they achieved their ultimate goal and purpose, they resented the fancied or real interposition of legal obstacles. A small but important percentage has been annoyed. Thus, periodically there has come into public print a rash of complaints about "vague uncertainties" in the act, lack of "positive definition," "arbitrary" enforcement activity, "unpredictable" court demarcations of the scope of the law, and the like.

But, by and large, most businessmen—that is, all but a small fraction of our 3,500,000 enterprises—have always realized that nothing in the antitrust laws forebade vigorous, independent competition. Like good pilots who safely bring their ships into port by knowing where the deep water is, the conscientious businessmen have not needed nor asked for blueprints mapping out every shoal of "non-permissible practice." They have simply gone ahead competing vigorously for customer patronage.

The squeaking axle, however, naturally gets the grease. Overwhelming in number as were the competing enterprisers, many of them operating on a large scale, the proportion of output produced, transported, and distributed by them was not commensurately large. Steadily in one industry after another, technological and financial giants captured more and more of the market. The few "million-dollar-trusts" that scared the public in 1890 look like pigmies now alongside the famous "two hundred" spotlighted by Berle and Means or the half a hundred or more billionaire corporations that dominate finance and industry today.

Such giants are not only found in banking, insurance, railways, public utilities and natural monopolies. Whatever may be the causes—technological efficiency, high finance, two World Wars, or what have you—more than a third of the total value of all products even in the field of manufacturing is produced in industries where the four largest producers account for over 75 per cent of national output. Almost another third is produced in industries where the four largest firms account for more than half, though less than three-fourths of total production. Nor is the movement limited to basic industries. Recent studies of mergers by the Federal Trade Commission document a widespread "swallowing up" of independent competitors in the textile, food, and distributive trades.

Clearly the antitrust laws have not preserved competition. In fact, it is doubtful whether during most of the period since 1890 Congress has actively so desired. While its oratory has been "agin monopoly," its acts have steadily exempted one industry or practice after another from compliance; farm marketing associations, labor unions, shipping, banking, etc. The legalization of price-fixing in the Miller-Tydings Act and the *carte blanche* given to railway executives in the Bulwinkle Act are but recent flagrant examples. But for the election upset, legalization of basing point and formula pricing and/or exemption of insurance executives might have come next.

Despite a quarter of a century of reiterated pleading from its Federal Trade Commission to close the loopholes in Sections 7 and 11 of the Clayton Act, Congress has done nothing to prevent merger by sale of assets. No

hindrance has been placed upon vertical and lateral integration. The "gobbling up" of competitors ravages on unchecked.

Congress has disregarded all suggestions to strengthen the law. One of its more important investigating bodies, the Temporary National Economic Committee, thoroughly examined and documented the case for many much needed improvements. It urged a statute imposing civil penalties which would deprive a monopoly of its monopolistic gains. This would have eliminated the humiliating spectacle presented in the Hartford-Empire case wherein the Supreme Court found flagrant abuse of patent privileges but felt constrained to let the violator in effect "keep the swag."

Congress has similarly failed to act on a number of bills, presented by such intelligent and far-sighted statesmen as Senator Joseph C. O'Mahoney of Wyoming, which would put teeth into the antitrust laws. Instead of the present piffling penalties, which are so low as to constitute at most a good business risk, Congress has refused to authorize fines on individuals and corporations that would genuinely deter deliberate and repeated violation—fines equalling, for example, half or more of the net profits earned by the corporation, or salary earned by the persons, during the period it was, or they were, violating the law. Some have suggested penalties upon convicted executives barring any organization in which they hold a responsible executive position from obtaining governmental aid, subsidies, tariffs, patent grants, purchase contracts, mediation or other benefits. Congress has not considered the matter.

Likewise, Congress has not required the registration of international cartel agreements. Were there a sanguine interest in devising means of buttressing the antitrust laws, there might have been resort to a number of other expedients such as taking the tariff off commodities produced under "conditions of oligopoly and monopoly," repealing the Webb-Pomerene Act, ratifying the ITO charter, revising the patent laws so as to prevent monopolistic abuses, fostering and mobilizing technological research nationally, and inaugurating a program of aid to small and new business. Such a program might be similar to that now operating in the field of agriculture, a program of diffusion of information, research and technical assistance, financial backing, and appropriately modified taxation. To all such proposals Congress has thus far turned a deaf ear.

Until recently the courts have also done their share in impairing the vigor of the antitrust laws. By emphasizing legalisms such as formal proof of "meeting of minds," they have struck down weaker and sometimes innocuous types of agreement between independent producers while giving a clean bill of health to corporate giants by such judicial inventions as the "rule of reason," and doctrines that "mere size is no offense" and "not existence but abuse of monopoly power must be proved." Thus a colossus such as the Aluminum Corporation of America, the classic example of monopoly, was allowed without even the initiation of government complaint (until 1937) to "stabilize prices," "adjust production to consumption" and "prevent market demoralization and chaos," while scores of tenuous arrangements between small producers in

and out of trade associations were struck down as conspiracies in restraint of trade.

The record of emasculation in *U.S.* v. *E. C. Knight Co.*, *Standard Oil Co.* v. *U.S.* (1911), *U.S.* v. *United States Steel Corporation* (1920), *Arrow-Hart and Hegeman Electric Co.* v. *Federal Trade Commission*, and similar cases is well known. Fortunately the record has been conspicuously improved in recent years by such notable decisions strengthening the antitrust laws as *Morton Salt Co.* v. *G. S. Suppiger Co.*, *U. S.* v. *Aluminum Corporation of America*, and in particular the opinion of Justice Burton in *American Tobacco Co.* v. *United States* (66 Supreme Court 1125, U.S. 1946). This case, according to Professor Rostow in his *National Policy for the Oil Industry* (p. 137), clearly means that henceforth

> Painstaking search for scraps of evidence with a conspiratorial atmosphere are (*sic*) no longer necessary. . . . Under the Tobacco case, the economic fact of monopoly is very close to being the legal proof of monopoly. . . . Parallel action, price leadership, a reliance on advertising rather than price competition as a means of inducing changes in each seller's share of the market and, above all, size—the market position of a small number of large sellers or buyers—these are now key points to be proved in a case of monopoly, or of combination in restraint of trade. . . . The decisive elements are the power to assert a degree of control over price and output in the market as a whole, and the power to deter or discourage potential competition.

Future decisions of the Supreme Court, may, of course, depart widely from the direction and outlines of Professor Rostow's interpretation, but if they do not, the impact of the antitrust laws upon monopoly may be substantial.

On the administrative side, except for the sincere and brilliant efforts of Thurman Arnold and Wendell Berge (under whose administrations more cases were filed and won than in the entire remaining lifetime of the antitrust act), over-all enforcement of the antitrust laws has been conspicuously weak. The federal government has been a policeman who looked the other way.

At no time have appropriations been remotely commensurate with the job to be done, nor have they ever been asked for. Even in 1939, the Anti-Trust Division spent less than $300,000 and the Federal Trade Commission slightly less than $2,200,000. In 1946, the sum-total appropriated for these agencies was still under four million dollars. A nation that spent more than 100 billion dollars in one year to defend its system of free enterprise against a foreign enemy devotes to protecting the system against monopoly less than enough to have financed its war effort for 25 minutes.

No wonder antitrust cases have not been pushed through with speed. In 1946, a sample of 41 out of 435 cases filed in the eight years from 1937-1945 showed four had been pending for more than seven years, and six for more than five years. Even the Federal Trade Commission which was given administrative powers precisely so that justice might be dispensed with dispatch, often requires over three years and has been known to take as long as eight years to push its cases to completion.

Coupled with lack of money, the major reason for these shortcomings is insufficient personnel not only in numbers but in competence. Both political

parties have observed long since that the persons likely to run afoul the antitrust laws are not the ordinary socially ostracized criminals but rather the more respectable, powerful and wealthy businessmen, those most likely to command not only dollars but newspapers and votes, and often indeed Congressmen. Zeal, initiative and resourcefulness in enforcing the antitrust laws are likely to be much more embarrassing virtues in an administrator than obsequious caution, meticulous solicitude for congressional and public relations, and indefatigable insistence that every protection of procedure or evidence be given the defendant.

Because of such stultification, particularly when intensified by witch hunts and by business-fomented contempt for "bureaucrats" and "tax eaters," lawyers and economists of integrity, objectivity and vigorous independence of thought usually prefer almost any type of employment to working for government. Those who plan to use government service as a stepping stone soon discover that skill and productivity in developing civil suits and criminal indictments (and what's worse, ability to make them stick) are qualities not highly conducive to making the "right friends" and influencing the "right people."

The effective and conscientious lawyer or division chief in antitrust agencies may find himself somewhat alone—first of all, in court. In the cement case there were three FTC attorneys pitted against 41 of the largest and most successful law firms in the country. In the Madison Oil case there were five for the government against 103 protectors of oil. Higher government échelons, moreover, may not be grateful for his contribution to their administrative headaches. He is also likely not to receive invitations to participate in those numerous important informal government-business policy get-togethers so indispensable to intelligent law-making and cooperative, effective administration. He thus finds antitrust activity to be attended with some measure of risk of damage to his reputation and career. These factors (plus in some cases social coventry or failure to "make" important social affairs given by the "best people" and higher-ups) cause high turnover of conscientous personnel at lower levels, while those too important to be let go even with a transparently flattering letter are often "kicked upstairs," sometimes graduated into judicial eminence.

There are, of course, a large number for whom government service is just a job. If they were too naïve to have realized the fact in advance, they soon learn that a high reputation among businessmen for constructive and understanding public service usually is acquired by excelling in those government activities through which favors are ladled out. It's a much shorter step into lucrative business posts and honorific university assignments from a War Production Board, Reconstruction Finance Corporation, or the Departments of War, Navy, Commerce, and State than it is from antitrust. Consequently, those who are ambitious and, needless to say, those content with a long, serene career in regulatory agencies, wisely follow the tactic of being spineless chair-warmers, never "sticking out their necks."

Even if personnel in the antitrust agencies feel sufficiently rewarded for their industrious activity by the consciousness of arduous duty done, there

are those in other governmental departments who do not fully share the glow. Violators of the antitrust laws often find many a sympathetic shoulder there to cry on. I know of no instance in which because of difficulties with antitrust, businessmen ever lost out on a government contract, research grant, subsidy, tariff or other favor. In some cases they have been given not only effective support but active assistance in building political backfires at both ends of Pennsylvania Avenue.

In too many instances such treatment of antitrust (as a competitor in the classical sense; one with whom one has no friendly dealings) is due not merely to normal bureaucratic preoccupation with intra-agency problems and inter-agency knifing. It also stems from the fact that Congress has imposed responsibilities the discharge of which is made difficult, if not impossible, except by "playing ball" with enterprises so large as to be enmeshed in practices contrary to the antitrust laws. During the war procurement officials would have been helpless without the active cooperation of big businesses. To whom else could research funds be allocated? In short, there are sometimes goals superior to uncompromising enforcement of the antitrust laws.

Precisely because "nobody loves the cop," antitrust agencies prefer to initiate cases on the basis of complaints. While only a fraction are acted upon, such cases are not only most likely to be easiest to win but to be most productive of political support and larger appropriations, with subsequent policing of the outlawed practice automatically enforced by business itself.

Unfortunately, there are many instances in which businessmen, all of them by no means small, are afraid to complain or refuse to testify and provide evidence, or do so only after making pitifully certain that guarantees of secrecy and anonymity are adequate. Monopolistic practices in such cases are often precisely the most vicious and strong. What can the administrator do? Forget about it? Challenge the powerful industrial police system? Or find a face-saving formula?

The most palatable solution is, of course, a maximum appearance of enforcement with minimum actual alteration in highly profitable practice. Hence the emphasis on legal victories which look good in annual reports and budget hearings, even though many are almost completely empty so far as the actual breaking up of a monopoly or the elimination in reality of that which was achieved by a monopolistic practice is concerned. It may be acute fear of making this discovery that accounts for the happenstance that none of the antitrust agencies has ever systematically followed up its cases to find out how far actual business operations had been changed. Frequently the only result, as Professor Rostow has indicated in the Socony-Vacuum and Ethyl Gasoline cases, is the invention of substitute legal devices leaving the basic monopolistic economic activity undisturbed.

It is easy to exhort the antitrust agencies to cut loose from the political support of those who dare to complain, and urge it to spend its limited funds for systematic surveys of concentration of economic power, industry by industry, and then to proceed to take action against the most important areas of concentration even though not a single congressman or other representative of the government has received a single complaint. It is easy to

find fault with antitrust for accepting pleas of *nolo contendere* and consent decrees, rather than fighting dissolution suits through to Supreme Court determination. The power of pressure groups being what it is, it is also futile.

In the organic sense of the term there is but little genuine support for enforcement of the antitrust laws. Certainly, buyers like competition among their sellers and *vice versa*. But it is not enough that a person want the antitrust laws enforced against other people. Does he support enforcement against himself and others in his industry? Or does he know a hundred and one reasons why monopolistic practices, while evil elsewhere, are nonexistent or harmless in *his* business? If the latter case, he cannot be said to oppose monopoly any more than a person who believes that all prices except his own are too high can be said to oppose inflation. Such groups—farm organizations, labor unions, retailers, manufacturers' associations, etc.—in short, all groups that tolerate only so much competition as they cannot prevent, believe, in effect, neither in the antitrust laws nor in free enterprise. They abet and foster monopoly and inflation.

Yet a coordinated policy designed to preserve and enlarge that which remains of a "broadly competitive economy" requires coordinated action throughout business, labor, agriculture, and government. President Roosevelt in his message on the TNEC, Senators O'Mahoney, Kefauver, Kilgore, and Morse in a series of antimonopoly bills, The Twentieth Century Fund in its studies on cartels and competition—these point the road most likely to achieve the goals of the Sherman Act.

For such a coordinated attack on monopoly, the first requirement is a coordinated, flexible adaptation of policy and tactics to over-all economic conditions and needs, which in turn requires a full-fledged Bureau of Industrial Economics serving as an economic intelligence agency for government as a whole. In a TNEC monograph on *Measurement of Social Performance of Business* I have suggested some vital functions and activities for such an agency, emphasized the indispensability of information, corporation by corporation, if a beginning is to be made toward successful enforcement of the antitrust laws. I have also outlined some rudimentary though as yet unsatisfactory methods for making a social audit of the performance not only of individual industries but of particular business corporations. The important fact, then as now, it seems to me, is not the size or number of producers but their social performance. It is not competition *per se*, but the benefits of competition, that is, maximum freedom of enterprise including freedom from the fear of abundance, maximum production at minimum real costs and prices, maximum real income and employment. What is the pattern of performance of the industry or business as a whole?

Such information is rarely sought and never presented, unless it should happen to buttress a particular point in the briefs of litigants in antitrust cases. Nor ought one to expect that it would be. Similarly the antitrust laws cannot be expected to provide the entire solution, or even a major portion. The unending fight to preserve as much as feasible of a democratically controlled, free enterprise economy is everybody's job, a continual struggle

in which every agency of business, labor and government must do its part. Not merely the antitrust laws and agencies but all of us are responsible for failure to "protect and preserve a broadly competitive system."

Edward H. Levi

University of Chicago Law School

I think there are three principal reasons for the relative ineffectiveness of the antitrust laws:

1. The courts are not sufficiently aware of the monopoly problem. As an aspect of this, the courts have not sufficiently considered size rather than the abuse of monopoly position to be the violation of the law. And as another aspect of this, they have tended to think that a finding of violation and an injunction against further monopolistic actions constitute sufficient relief. I believe that this point is the result of points (2) and (3).

2. The Department of Justice has never had a sufficiently sustained and energetic policy of enforcement. Enforcement is sporadic; vigorous enforcement is branded as witch hunting and is followed by a "period of reasonableness." One result of this is that the courts are not forced to face the problems of size in monopoly. Because there are so few monopoly cases, the courts are relatively uninformed as to economic conditions in key industries and the law itself does not develop as rapidly as it would if more cases were brought. Enormous gaps in the law are permitted to remain and this makes it much easier to have an ineffective enforcement policy.

3. Economists in general, I think, must bear a great share of the blame. The general impression of the public is that monopoly is inevitable and since it is inevitable, it is silly to try to prevent it. A variation of this is the popular opinion that it is childish to be against monopoly (perhaps because it is inevitable) and that, therefore, a monopoly cannot be said to be "bad" or a violation. In other words, I think economists have failed to distinguish between descriptions of our present economy and analyses of what can or ought to be done. Thus, even critical essays on the present state of the economy become a basis for a weak enforcement policy and for a lack of understanding on the part of the courts.

Ben W. Lewis

Oberlin College

In my judgment, the antitrust laws have made our economy much more competitive than it would have been in their absence. Furthermore, they can continue indefinitely to be so employed as to preserve a condition of more vigorous competition than we could otherwise hope to enjoy. On the other hand, the conditions of their application have been such as to make them less effective through the years and at present than they might have been. Some

of these conditions can be improved. I have come to believe, however, that the basic purpose we have sought to achieve through the antitrust laws is inherently incapable of accomplishment; that these laws now represent a rear-guard (albeit, a very important rear-guard) action; and that in the years ahead a considerable and increasing portion of our economy will come to be controlled through conscious public action (probably public enterprise) rather than by the "automatic" processes of competition bolstered by the Sherman Law.[3]

We are capable of doing a better job with the antitrust laws than we have done in the past. Probably they need statutory strengthening along the lines suggested by Messrs. Kefauver and Watkins at the December, 1947 meetings of the American Economic Association (see *Papers and Proceedings* of the Association, May, 1948, pp. 182-202; 204-8;[4] certainly the Anti-Trust Division needs more funds than Congress has ever yet seen fit to appropriate; and above all else enforcement of the laws stands to gain from any increase in public support, executive drive and judicial understanding that can possibly be developed.

But even if these measures should all be brought about—which I very much hope and very much doubt will be the case—it is my belief that the antitrust laws are inherently incapable of maintaining really effective competition. The *real* difficulty—the *basic* difficulty—in their application and enforcement is not to be corrected by statutes, appropriations or sentiment, sympathy and eagerness. It is simply not to be corrected—period.

The Sherman Act was put on the books in 1890; in 1948 we haven't the foggiest notion of the meaning of the Sherman Law as it relates to the prime organizational problem that has confronted our economy throughout the full life of the law—large-scale corporate industry. We are still playing guessing games with the Supreme Court. But, while it is easy to lay the blame at the door of the Supreme Court, I will suggest that if the Court has failed at any time to express accurately the intent of Congress, it has always been within the formal competence of Congress to change the law in line with its desires. But Congress has had no precise mandate or direction from the American public; and the public, in turn, has been given nothing but the most confusing advice from its technical experts— its professional economists. It's a tough problem—inherently tough— and just possibly the real reason why the interpretation and application of the Sherman Law is still muddled and uncertain (and is likely to remain in that state) lies in this fact.

It is my belief that "free enterprise," *as an economic system*, is breaking up. The most we can expect from the antitrust laws is that they will make the break-up and the transition easier to bear. I want better laws, better enforced; but no revision of the laws, no additional appropriations, and no hypo-shots of zeal in enforcement will be capable, in my judgment, of bolstering competition

[3] It may be, of course, that factors and forces other than the failure of the antitrust laws will operate more powerfully and immediately to produce this result.

[4] I participated in the discussion in question, and with the permission of the secretary of the Association use some of the material which I presented and which appears in the *Am. Econ. Rev., Papers and Proceedings,* Vol. XXXVIII, No. 2 (May, 1948), pp. 211-14.

sufficiently to warrant permanent reliance upon it as the central organizing and regulating force in our economic system. The way is effectively and permanently barred by the presence—the increasing presence—of large-scale industrial, marketing and labor units. We will not reduce their scale in any significant measure.

I do not argue that competition is absent from our economy; it is present and at times it may break out fiercely in the most unexpected places. But it occurs systematically and regularly only in a narrowing area; elsewhere it appears only spasmodically, when someone feels that, as a matter of policy or strategy, a spot of competition would be worth trying. This I believe will continue inevitably to be the case, conspicuously, in the basic, mass-production industries. It is quite true that many people and many firms are engaged in competitive activities, but the kind and extent of their competitive maneuvers are determined by the management of powerful industrial units who are largely free to indulge in as much or as little competition as they see fit. It is "cold competition," a game, without compulsions either in the event or in timing. Anti-Trust can annoy, but it cannot compel a systematic course of competitive conduct. Competition today is sporadic in its operation and unpredictable in its effects. It simply is not present in a form and degree that will justify continuing confidence in its capacity to perform the highly important duties which the logic of free enterprise requires it to discharge.

Competition has not been supplanted by complete monopolies engaged in spectacularly evil conduct; what we face is the quite undramatic development of conditions, short of monopoly, under which competition as a regulatory force is being rendered ineffective. Important economic decisions are not ground out by impersonal competitive exchange in an open and driving market; they are made quite personally, by men—relatively few men—whom we do not choose and over whom we have only the most tenuous controls. "Free enterprise" as we know it, and as we shall continue to know it until we harness it by forces stronger than any competition we can conjure up and sustain, is *really free!*[5]

Granted that many present-day corporations and corporate empires have been expanded beyond any point that can be defended on grounds of pro-

[5] The exact extent and degree of competition obtaining at any time in any industry, and the exact point at which competition in particular situations, or generally, becomes ineffective, are not matters of precise factual measurement. Answers here must be in the nature of value judgments. Obviously, these judgments do not occur in an atmosphere barren of facts. Facts bearing on the nature, causes and extent of industrial concentration (intra- and inter-firm), the determinants and limits of managerial policy decisions, the nature of business and financial practices and arrangements, the nature and effects of public policies—all of these contribute to the complex out of which the value judgment emerges.

In my own case, for instance, I am moved by the kinds of industrial, financial and marketing situations and arrangements analyzed in such studies as T.N.E.C. Monograph No. 21, those set forth over the years in Anti-Trust and F.T.C. proceedings, and those familiar to all of us who had an opportunity in connection with our N.R.A. and O.P.A. duties to review industrial policies and practices. None of this impresses me as "sensational," nor does any of it seem to me to "demand" immediate drastic public action; none the less, for me, it adds up to the convictions expressed in this paper. I am very much aware, however, that these convictions are value judgments.

ductive efficiency, I still believe that they cannot be reduced and broken up sufficiently to insure effective competition without exacting a greater price than we shall be willing to pay. The scale of industrial and marketing operations required to support us in the style to which we have (or should) become accustomed is still so large as to render the resulting "competition" quite undependable as the regulator of our economy. I can easily believe that technological developments now foreseeable by those with vision may in some industries make possible the attainment of optimum productive efficiency at scales of operation less extended than those currently thought necessary.[6] I hope they do. When it happens, I'll believe it. Until it happens, however, I am not willing to alter either my predictions or the policy conclusions which those predictions seem to me to establish. The scaling down of hitherto large-scale industry may come about in certain instances as the natural result of technological innovations, but the movement has certainly not yet begun in strength, and we would be quite ill-advised to force such a break-up indiscriminately across the industrial front by starry-eyed governmental action taken in anticipation of innovations which as yet are only guesses.

Recently it has been sought to inject realism into inquiries concerning the effectiveness of the antitrust laws by directing attention to the concept of "workable" competition. Competition in the actual world is recognized as being less perfect and precise in its operation than the unrealistic, classical, class-room concept of "pure" competition, but it is thought, nonetheless, to be doing quite capably the promotive and regulatory job which under the logic of "free enterprise" it is supposed to do. It works![7] The exact bounds and content of workable competition have not been authoritatively determined and defined, but it is suggested that competition is probably present and "working" in an economy such as ours which is characterized generally by progressive technology reflected in lowering prices, increasing output and new and improved products. The point is made that in appraising the effectiveness of competition we should not look to form and structure (the number and size of firms in the several markets, *i.e.*, the degree of "concentration"), but, rather, to market results. If prices, and the kind, quantity and quality of products are satisfactory, then competition is satisfactory; it is working. The conclusion seems to be that competition is "working" throughout most of our economy.

I am willing to accept considerable leeway and tolerance in the operation of competition (or any other regulatory force, for that matter), but I am not willing to judge its effectiveness or to decide whether or not it is workable and working solely or even largely on the basis of "results." Prices have been lowered, output is large, and there have been innovation and improve-

[6] See G. M. Blair, "Technology and Size," *Am. Econ. Rev., Papers and Proceedings*, May, 1948, pp. 121-52.

[7] E. S. Mason talks of workable competition in his contribution to this symposium and in his paper, "Competition, Price Policy and High Level Stability," at pp. 19-31 of *Pricing Problems and the Stabilization of Prosperity* (1947) published by the United States Chamber of Commerce. See, also, J. M. Clark, "Toward a Concept of Workable Competition," at pp. 452-76 of *Readings in the Social Control of Industry* (Blakiston, 1942).

ment in techniques and goods. But, unfortunately, these results do not tell the story. Results alone throw no light on the really significant question: have these results been *compelled* by the system—by *competition*—or do they represent simply the dispensations of managements which, with a wide latitude of policy choices at their disposal, happened for the moment to be benevolent or "smart"? This points up the real issue. The answer is of the very greatest moment for the future of our economy, and in seeking the answer the matter of form and structure (the degree of industrial concentration) is of foremost importance.

I will concede quite readily that we may enjoy immediately satisfactory prices and output even though competition is not perfect; indeed, I will go further. We may enjoy immediately satisfactory results even though competition is not "working," if the persons who make decisions are willing, in their wisdom or benevolence, to permit such results to trickle down. The absence of identifiable extortion or restriction does not, by itself, establish the presence of effective competition. For competition to be effective or workable, or even acceptable, in any significant, lasting sense, it must not only permit, *it must compel the results we want by the necessary and continuing operation of its processes.* The array of price and output policies from which managements are free to choose must be strictly limited. Satisfactory results which happen but which, equally, might not have happened are not good evidence of the successful working of an economic system or of competition as an integral part of an economic system. The *process* by which results are achieved and assured is the very essence of an economic *system.* As a consumer I like low prices, but to me competition is not "working" in an industry whose individual firms are powerful enough to hold prices down in the face of a general inflation. The immediate result is welcome, but I want the decision on prices to be made by society—either through the compelling forces of a competitive market or, if competition is not sufficiently workable to compel the decision (or the decision we want), then by action of a responsible government.

The key to the effectiveness of competition is to be found in its power systematically and predictably to compel economic decisions, and I do not believe that any such power or force characterizes the competition present in industries composed of, or dominated by, either a single firm or a few large firms. Such firms have the power to select their price and output policies from a wide range of possible action; neither competition nor any other force or combination of forces restrains or compels their choices except, at best, at the outermost limits. They are possessed, as well, of power to increase their defences against competition and to protect their positions. To speak of *potential* competition as a compelling regulatory force in this situation is to be blind to the strength of the factors that retard and will continue to retard the drive of potential competition to become actual competition.

Some indication of the looseness of the regulatory force of competition in mass production industry is to be found in the exhortations increasingly being delivered by economists, public officials and "enlightened" business leaders, urging managements to shape their price, output, wage and invest-

ment policies in accordance with long-run, over-all social considerations: increased purchasing power and consumption, full employment, an economy of plenty, etc. If competition, actual or potential, were really effective, these exhortations would be quite uncalled for and wholly useless. Need I add that as a prime regulatory instrument in our economy exhortations would seem to leave much to be desired? Something more certain in its promise and compelling in its force than an appeal to the good will and social consciousness of business leaders is called for in economic situations where sound criteria of individual and corporate gain run directly counter to sound criteria of general economic welfare.

Although the present discussion relates primarily to antitrust and industry, it is pertinent to note that developments corresponding to those in industry are under way in labor and agriculture. None of these is likely to be reversed. It could be, of course, that these groups will come to serve as checks upon each other, and that our economy in its movement away from dependence upon individual self-interest and competition will sometime emerge as a society of "responsible men" balanced in "responsible groups."[8] I note still another major development, however—big government—and my own *guess* is that we shall come increasingly to rely upon government (*i.e.*, upon ourselves in our collective *governmental* rather than our *economic group* capacity) to perform the economic tasks hitherto assigned to competition. Nor am I particularly disturbed by this; personally, I am not fearful of the democratic process and I do not doubt its ability to maintain its democratic character.

A final point, involving a different meaning for the term "workable": is competition any less "effective" than it needs to be in order to be "workable"? The suggestion implicit in this question is that pure and perfect competition is unsuited to the physical and economic requirements of modern mass industry with its specialized capital—that managements of these firms need great leeway, need freedom from the unreasonable, nagging restraints and dictates of the kind of competition appropriate to more primitive markets. This I can believe, but it seems to me to constitute not only a convincing explanation (and excuse) for the looseness of competition, but also a confirmation of the fact of its looseness—such looseness is inherent and inevitable! The fact that managerial action must be free (and, hence, *ought* to be free) from the frustrating hand of competition means simply that under modern conditions of production and marketing the kind of competition that will work so far as individual firms are concerned is quite unworkable as the prime regulatory instrument for the economy as a whole. The freedom of action needed by modern management, if its search for individual security is to succeed, is so great that whether because we fear its misuse or because we value our self-respect, we cannot properly leave it, unrestrained, in private hands.

What we want in a democratic economy are compelling forces that will drive individual activity systematically and predictably within narrow channels named and approved by society. Social responsibility must attach to

[8] See J. M. Clark, *Alternative to Serfdom* (Knopf, 1948).

individual economic decisions: economic decisions must be made under such conditions that lines of responsibility and control run from those materially affected by the decisions to the persons engaged in making them. Under the classical logic of free enterprise social responsibility was assured by the presence of competition; under modern conditions of mass production competition cannot, and cannot be made to, give us the assurance we need.

Let me make my indictment quite clear: I am not undertaking a shotgun attack on all of the inequities and shortcomings of our present way of economic life. Neither am I suggesting that our present way of life doesn't furnish quite a lot of us with quite a lot of relatively secure comforts. Indeed, it is part of my thesis that the economic ease which we are currently permitted to enjoy serves to insulate us from any considerable awareness of the loosening processes at work within our economy. My charge relates to the dilution and weakening of competition as a compelling regulatory force, and the consequent growth of irresponsibility in the making of economic decisions; and to the disintegration of free enterprise as a system which this development reflects. Irresponsibility as an abiding feature of an economic system is not made palatable by the fact that the power it represents is not always misused, and disintegration is no less real because it is cushioned and draped.

We need the antitrust laws, refurbished and refueled. But we shall need more—a lot more.

Irving Lipkowitz

Reynolds Metals Company, New York City

The antitrust laws are at best a negative means of promoting competition. Their province is limited to the violations of law. As a consequence, they can deal only with the wrong-doer, and only in so far as the wrong is recognized by law and satisfactory evidence against the culprit can be obtained by the law enforcement agency and presented to an appropriate court. Law enforcement by itself, no matter how broad and competent, can no more do the whole job of establishing and maintaining a competitive system than it can produce harmonious relations between labor and management.

Half a century ago, when the basic pattern of the antitrust laws was fixed, it might have been enough for government to be merely antimonopoly. Perhaps in those days the government would have had merely to eliminate the specific abuses of monopoly power in order to give competition a fair chance to develop and thrive in most industries. Whatever the situation was then, today much more than that is needed if there is to be real competition in most of the key industries. Many of the obstacles to unrestrained competition are "legal," and therefore beyond the reach of the government's antimonopoly laws and agencies.

Healthy and productive competition is a way of business life, not merely the absence of illegal monopolies. Like democracy, it must be cultivated. It does not come naturally to all businessmen and does not survive or maintain

itself with equal ease in all industries. If our economic system is to be more effectively competitive than it is now, the government will have to promote such competition by more direct and positive means than mere law enforcement.

A government agency, sufficiently endowed with authority and appropriations to attract competent personnel, should be created to promote competition. It should not be the traditional "small business" clique. All big business is not automatically monopolistic, all small business is not necessarily competitive. This procompetitive government agency would not have the responsibility for enforcing the antitrust laws. That would still be the function of the present antimonopoly agencies. However, like any other government agency, it would refer to the Department of Justice any violations of law which incidentally come to its attention.

The first task of this agency would be to find out what is the state of competition, and conversely of monopoly, in each of the important industries. Where it found that competition was weak, it would then have to decide how desirable it would be to stimulate or promote greater competition in that industry. If the decision were in favor of stimulating competition, then a thorough diagnosis would have to be made to determine the best course of action. In one case the problem might be financing, in another patent or technological pools, and in the third case the advantages which the dominant company might get from a highly effective intensive advertising campaign. In some cases this agency might find the government can do nothing to establish competition in an industry unless it is willing to subsidize some of the "competitors" ad infinitum.

At each stage in its analysis the procompetition agency should make its findings and recommendations public and understandable. If nothing else, this agency would tell the country how much or how little competition there is, in what industries, and what—if anything—could be done to improve the situation.

This agency should be left free to recommend any course of action which it deemed most practical for the particular situation. In one case it might require no more than internal rearrangements within the industry without any further government intervention. At other times this agency might find it necessary to seek special government financing for the less powerful members of an industry. Or, its program might be so drastic and the industry so important as to require Congressional review and approval. Under no circumstances should the procompetition agency be required to limit its remedies to just those which could be handled through court procedures or consent decrees.

Will such an agency be so powerful as to jeopardize free enterprise and democratic processes? No, because its power will vary from industry to industry, directly with the strength of monopoly and inversely to the degree of competition. Its decisions should be subject to review by a board of competent representative citizens which should pass on any challenged facts and on any charges that a particular recommended remedy is too harsh. How far

such an agency would be permitted to go in a particular industry would depend on how anxious the nation was to have that industry more competitive.

There are probably many different ways of achieving what the procompetition agency outlined above is intended to do. But in any case the approach must be that direct and positive. The difference between promoting competition and antitrust law enforcement is the difference between a Tennessee Valley Authority directly stimulating the greater use of electricity and a state regulatory body trying to do the same through rate-making procedures. The government should concentrate its efforts on getting an industry to do the right things more often and not confine its efforts to restraining or punishing the wrongdoers.

If the traditional antimonopoly approach is to prevail, however, then the antitrust agencies should have as broad powers and extensive facilities for watching and intercepting the flow of commerce as police departments have with respect to the flow of vehicular traffic. Lacking such powers, these agencies should not be held responsible for the defective flow of commerce.

The powers of the antitrust agencies to get essential facts about conditions in a particular industry should not be limited to the subpoena rights of a litigant. Every investigation does not presuppose a lawsuit. Moreover, the standards of proof in a monopoly case should not be the same as when a human defendant's life is at stake. In actual practice, the more powerful the monopoly, the more difficult it is to get the evidence necessary to convict it. The more dominant a monopoly is, the more reluctant businessmen are to testify against it—for fear of repercussions. An all-powerful monopoly rarely finds it necessary to lay down the law, orally or in writing, to its would-be competitors. The anomalous result is that the more evident the monopoly, the less evidence the government can obtain. Only when the monopoly lacks full control does it have to threaten and take the kind of actions which are the makings of a successful antitrust action.

The courtroom processing of antitrust cases can also be improved greatly. Specialized courts are needed, staffed with a judiciary well versed in the complexities and realities of business practice. Such judges would then be in a position to adapt the rules of evidence to accelerate the presentation of business facts without sacrificing the quality of proof.

Essentially the lack of adequate governmental machinery for guaranteeing the nation a competitive economic system reflects the indifference or hostility of both organized business and organized labor. Of course, within each industry both groups want to get the benefits of competition in other industries, but do not want to give others the benefit of competition in their own industry. Any program for making our economic system more competitive must therefore start with a campaign to get industry and labor groups to support actively specific proposals to promote competition and to make antimonopoly drives more effective.

Edward S. Mason

Harvard University

The great difficulty in answering the question you raise lies in the interpretation one is to put on the phrase "broadly competitive economic system." There are at least two sources of confusion: (1) is competition to be understood strictly in the market sense of the term or does it also embrace considerations having to do with the structure of the *political* economy, *i.e.*, concentration of economic control?; and (2) in so far as attention is concentrated on competition in the market sense, how does one measure departures from competition, *i.e.*, the degree of monopoly.

1. When people speak of a decline of competition, they frequently are thinking of such phenomena as the rise of the large corporation and the relative decline in the importance of sectors of the economy associated with small scale enterprise, *e.g.*, agriculture, which may or may not have anything to do with competition in the market sense of the term. One way of characterizing the phenomena they have in mind is "concentration of economic control."

There are various ways concentration may be measured, each of which has its own significance. Among them is a number of employees per business unit. It is, of course, obvious that the ratio between the number of business units and number of employees is continually declining as a result of the continued shift from agricultural to industrial employment, the relatively rapid growth of sectors of industry characterized by large-scale enterprise, and the increase in the size of the optimum unit in almost all branches of industry.

There is, furtherfore, little doubt that this changing ratio of number of firms to number of employees has great significance for the functioning of the *political* economy. It affects the location of political power, the character and size of pressure groups, employer-employee relationships, etc. It is certainly true that it is changing the character of American democracy and it may be true that it threatens the continued existence of democratic institutions.

But it has no necessary or even obvious connection with competition in the market sense of the term. No one has been able to show as yet that monopoly is more important in the economy than it was fifty or one hundred years ago or that competition has declined. Partly this has to do with ambiguities in the interpretation of competition and in difficulties connected with the measurement of departures from competition in whatever sense the term is used.

2. The most precise notion of competition is pure or atomistic competition but this is (a) a limiting concept in (b) a purely static analysis. Although it is possible to measure *conceptually* departures from pure competition in various ways such as ratio of price to marginal cost, ratio of actual to competitive profits, ratio of actual to competitive output, etc., each of these conceptual measures is firstly only a partial measure even on its own terms and assuming static conditions, and secondly, is not susceptible to statistical application.

Moreover, this whole conception of competition and monopoly is purely static. In the American economy new products, new techniques, new locations, changing consumer tastes, etc., are continually breaking the existing patterns of market relationships and forming new ones which in turn emerge only to be broken. How is this process to be fitted into conceptions of monopoly and competition? No one has as yet provided any satisfactory answer.

In default of answers running in terms of the degree or extent of departure from pure competition people have recently sought an answer to the question whether various industries are or are not "workably competitive." Presumably this notion fastens attention on the *results* of a particular market structure. Is the existing set-up accompanied by a progressive technology, the passing on to consumers of the results of this progressiveness in the form of lower prices, larger output, improved products, etc.? Although there is a certain attractiveness to this conception, it must be admitted that no one as yet has given it any precision. Whether a given industry is judged to be workably competitive will depend to a very substantial extent on the "ideology" of the judges. And who is to say in these terms whether the American economy is or is not more "broadly competitive" now than it was in 1890?

Whatever answer is given to this question, I believe myself that the American economy is in fact substantially more "workably competitive" than it would have been without the existence of the antitrust acts. This is due, I believe, not so much to the contribution that particular judgments have made to the restoring of competition as it is to the fact that the consideration of whether a particular course of business action may or may not be in violation of the antitrust acts is a persistent factor affecting business judgment, at least in large firms.

It is frequently stated that the greatest defects of antitrust policy are in handling the monopolistic or monopsonistic bargaining power of the large firm and the problem of mutual interdependence which may exist when a few large firms are predominant in a market. This judgment, however, usually will be found to emanate from those who have a static approach to the problem of monopoly and competition. Until it is clearer to me than it is now (a) that the large firm in the presence of manifestly dynamic influences exerts an adverse monopolistic influence on the functioning of the economy and (b) that any possible action under existing (or a modified) antitrust policy would remedy the situation, I have my fingers crossed.

Breck P. McAllister

Donovan, Leisure, Newton, Lumbard and Irvine, New York City

I would group my impressions as to the effectiveness of the antitrust laws into two quite separate and distinct categories.

First, I think of effectiveness in terms of a police agency prepared to deal with ordinary police functions. In this category I include such important matters as price-fixing at any level of trade, and what often goes with that,

efforts by trade groups to fix and maintain particular channels of distribution. On this last point I have in mind efforts such as those of a wholesale group to prevent manufacturers cutting them off by selling direct to retailers, efforts by a retail group to prevent manufacturers from selling direct to consumers, and combined efforts of both kinds of groups to the same end. In short, I have in mind any effort at cartelization or stratification of the distributive channels. In this category you find not only efforts of these groups to maintain their status but also efforts directed towards price control.

As to the general effectiveness of antitrust as a police force in this important category of cases where there are no questions of uncertainty as to the law and the criminal process is generally used, it is my impression that on the whole we have, to a considerable extent, prevented our economy from crystallizing after the manner of, let us say, the British economy. We have not, however, been entirely successful. One failure grows out of the successful effort of the trade groups in question in our legislative halls, both federal and state. In this connection I have in mind particularly the so-called "fair trade laws" and "unfair practice acts" in the state legislatures, together with the Miller-Tydings Amendment to the Sherman Act. In short, we have an important degree of disagreement as to the direction which our public policy should take.

The efforts of Anti-Trust have also been hampered in varying degrees throughout the years through lack of adequate appropriations and personnel. The remedy here is plain and I should like to see it applied by the Congress. I know of no reason why, if adequately equipped, Anti-Trust could not be an effective instrumentality to maintain an adequate play in the joints of our economy in the area I have indicated. In fact, it seems to me that over the years much has been accomplished, and as we look at our economy and contrast it, again with the British, we find that the distributive trades are in a position that I, for one, would describe as a broadly competitive system.

You will notice that in this category my emphasis has been upon the distributive trades but I include in this category manufacturers in so far as their activities are directed to the ends I have indicated.

My second category is a category of a quite different sort. Here I am thinking in terms of the effectiveness of our antitrust laws in checking bigness. We have bigness and lots of it in many important industries. If I detected in your letter the assumption that one of the objectives of the Sherman Act was to make small business out of big business and keep business small, I would question this assumption. Put in another way, I do not think it was the objective of the Sherman Act to keep small business small. Throughout our economic history since 1890 we have had lots of small businesses that have become big. Henry Ford is an example that comes to my mind quickly. Many more exist in our important industries, new and old. Looking at this same problem from another point of view, you come to the question, how big may these enterprises be allowed to become before

they transgress some rather ill-defined notion of public policy? Any effort to answer this question will, of course, bring up a large set of questions with which I am not competent to deal.

It seems to me that your inquiry suggests that in some way Anti-Trust has been ineffective in keeping small business small or, put in another way, keeping big business from getting too big. In this category the problem that confronts Anti-Trust is tremendous and it should not be surprising that we find ourselves with big business in many important industries. I do not want to attempt to state in a few short sentences why business is big. That is a study in itself and it is a study that must take account of important technological and economic factors. Would we have better and cheaper automobiles if we had 100 little businesses making them? A question such as this might be asked as to a great many industries and the only meaningful answer would be one that came from a careful study of that particular industry. The answers might be quite different in different industries.

Another important aspect of the problems in this second category is the question of the effect of bigness on price and other competition. I dare say the economists are having great difficulty in analyzing the important effects of bigness on the traditional economic thinking as to supply, demand and price and the many other important manifestations of competition. I can only give you the impression that I have from close observation of the behavior of a few industries and the effect of the enforcement of our antitrust laws. It is my impression that today, more than ever before, our business leaders are aware of Anti-Trust and take account of public policy as it crystallizes from time to time in Anti-Trust and the decisions of the courts. The days of the ruthless business leader are over—and have been for some years.

I also think that it is too simple an assumption to make that because there may be only four or five companies in a given industry that, therefore, price agreements and other activities of that sort are in full swing. Bigness has its problems and plenty of them and it has important responsibilities in its industry. I am in no position to say, from the point of view of the consumer, that we would have better goods at lower prices if we had more and smaller companies in a particular industry. From the point of view of the labor leader, it is quite possible that in some industries only bigness will make it possible to have an adequate wage and a lower price to consumers. In another industry smallness as against bigness may be irrelevant. The answers to these questions might be "yes" in one industry and "no" in another and both answers would have a lot of guesswork in them. Our public policy is ill-defined. Our thinking, too often, is in terms of what to do about bigness rather than in terms of the objective of our impressive economy.

Harlan L. McCracken
Louisiana State University

If one were to ask me why our antitrust laws and enforcement had been of almost no avail, I would say that it is due primarily to the "Fourth Division of Government," namely lobbies and pressure groups. Every combination which desires to restrain trade constitutes a terrific pressure group. Witness the silver bloc, the farm bloc, the real estate lobby and the ever-present pressure from steel and aluminum.

This is the real and basic problem. All pressure groups desire benefits and special privileges for themselves, regardless of their general effects upon the national economy. Also, they are shortsighted and seem always to be working for a temporary *boom* even if it is pretty clear that the long-run results will be a *bust*.

Some have thought that we will have to organize a "consumer pressure group," seeing to it that it has a very large membership, a good treasury, and strong officers so that every time a small bloc presses for class legislation this large consumer group can force legislators to work at the issue from the national point of view and from the population as a whole. Without such an organization with officers and a treasury the case against blocs and pressure groups usually always goes by default.

From the economic standpoint I see no fundamental reason why we cannot restore a reasonable and high degree of competition if we want to. For example, we know there is a powerful connection between protective tariffs and trusts. Yet tariffs are man-made and can be unmade by man. There is no economic or logical defense for trying to strengthen an industry like steel or aluminum by giving it a protective tariff and then trying to weaken it by antitrust prosecution. I would, therefore, propose that wherever we find combinations restraining trade against the public interest we examine the tariff; and if they have been made immune to foreign competition by a tariff and immune to domestic competition by a trust, then I would say that the first step should be a sufficient reduction in the tariff to force foreign competition. Of course if it be an international cartel, then we would need to take direct legal action.

The difficulties of restoring a high degree of competition are almost wholly political and not economic or legal. Antitrust laws can be enforced where there is sufficient *will* to enforce them, and competitive enterprise can be made to succeed if given the proper opportunity and environment.

George Nebolsine
Cahill, Gordon, Zachry & Reindel, New York City

Your letter raises a question of considerable importance today—as to whether the Sherman Act, enacted prior to development of mass-production techniques, the invention of the automobile, the radio, synthetic chemicals

and the development of atomic energy, and reflecting the philosophy of the mid-19th century economists, has served to preserve a competitive system. I shall express my views briefly and ask you a question in turn.

Certainly, the conception of competition has been modified in respect to public utilities, carriers, and a host of economic endeavors which have come under government regulation. It is the current thesis of some economists that the alternative to the widest kind of competition—indeed, of atomization of industry—is government regulation of industry generally. I cannot concur in this view, since with a few (and very deplorable) exceptions nothing approaching the pure competition of atomized economic units as laid down by 19th century economic thinking has ever existed in industry. On the contrary, there has evolved, through trial and error and under the Sherman Act, a very great industrial expansion, the competitive behavior of which squares neither with the theories as to pure competition nor with the theories of monopoly behavior. There has taken place in industry generally in the last forty years amazing progress—through innovation, improved quality of product and of services rendered in connection therewith. Except for postwar distortions, there has been a general decline in prices of many manufactured articles. Labor conditions have improved.

There have been times in almost all industries when increase in unit size has been essential for efficiency and when cooperation among industry members at technical, marketing and financial levels has been essential to progress. Much of the concentration or cooperative endeavor that has taken place in response to economic needs has resulted in advancing the public interest.

As I read Dr. E. G. Nourse and Dr. Leon Keyserling, and other contemporary economic authorities, I find that an important trend of economic thinking points in the direction of making over-all economic *performance*, rather than *structure* of enterprises the main—if not the decisive—test of the public interest as applied to industry.

Such a view of the situation does not lead to the repudiation of the principles of a free market or the repeal of antimonopoly laws or the encouragement of monopolistic practices; it does suggest a more realistic view of the varied problems of industry than could be gained from thinking about competition in the abstract and by finespun interpretations of the three lines of Section 1 of the Sherman Act.

There is a suggestion in your question that the antitrust laws have been *ineffective*. I disagree with this: I believe they have been very effective. The economic structure of the United States, though far more advanced technologically than that of other countries, has greater potentialities of intra- and inter-industry competition within it than foreign industry structures which escaped the influence of the antitrust laws. Our competitive structure is an asset in our economy and we should preserve it wherever it can subsist. But we should not expect the *form* and *structure* of industry to reflect primitive technology. We should not seek to artificially create multiplicity of units through atomization of industry without regard to technological and market requirements. This would be a retrogressive step, out of keeping with economic needs.

The Supreme Court in the recent case *U.S.* v. *National Lead* refused to divide up the two companies engaged in the industry. The court invoked the tests of necessity, practicability and fairness of divestiture of plants. It stated that there was no showing that four major competing units would be preferable to two, or that six would be better than four.

The question posed by the Court is a challenge to the advocates of atomizing industry. Is it demonstrable that four competitors are preferable to two? Does it make any difference to the answer if the two are equally advanced technologically and are well-capitalized concerns that have enlarged their plant and improved the product? What if the alternative is a "sick" industry composed of competitors that can barely get along and are not in a position to introduce revolutionary improvements in the manufacturing process or to establish a product of high reputation in the market? In other words, is the test of the public interest performance or form? I do not think we can have it both ways.*

* I replied to Mr. Nebolsine's questions as follows:

You asked me for my opinion as to whether or not four sets of competitors are preferable to two, under various sets of circumstances which you state. I am glad to give you the best answer I can to that difficult question. My answer is that, in the interest of maintaining a broadly competitive system, there is a presumption in favor of having four rather than two competitors, and six rather than four.

As I see it, this presumption should be upset only when there is an affirmative showing that continuation of the larger number of competitors is resulting in failures such as those to capitalize fully the advantages of large-scale production or, as you suggest, is resulting in a "sick" industry composed of ill-balanced competitors, incapable of introducing revolutionary improvements in the manufacturing process or establishing a product of high reputation in the market.

I am not altogether sure that the desirability of having a broader competitive base would not justify foregoing full exploitation of the advantages of large-scale production. This, I take it, was the position taken by the National Association of Retail Grocers at their recent convention when, by inference, they favored the elimination of quantity discounts to "a small number of giant corporations" even though they could be justified in terms of the saving affected by handling the large quantities involved. In terms of maintaining a safe base of political democracy, which is my central interest in the antitrust laws, I can envisage some advantages in such a policy but I do not now embrace it. However, I do think it is demonstrable that four competitors are better than two unless having the smaller number clearly results in technological and economic gains of the sort you mentioned.

When there are two competitors rather than four, the chances of collusion about prices and production are obviously much increased. While I think too much emphasis is generally placed upon the conspiratorial impulses of the business community, I do not think these chances should be ignored. Likewise, in the complete absence of any collusion, the chances that a monopolistic course will be taken in the "follow the leader" pattern are increased when there are only two competitors.

If the heads of the two surviving firms were the hard-driving, fiercely independent type of businessman who has played such a large part in the industrial development of the U.S.A., two of them would be enough to create a ruggedly competitive situation. But if the two were of the genteel, clubby and inclined-to-take-it-easy type which is also known in the high reaches of American business, two companies might get together and tend to sleep together indefinitely. When the number of firms involved is small, the chances of having the industry animated by vigorously competitive leadership also seem to me to be relatively small.

Beyond those which I have mentioned there are, I believe, many other advantages in

George W. Stocking
Vanderbilt University

I believe the chief reason the antitrust laws have not been more successful is that no politically powerful economic group wants them to be generally enforced. This is partly due to ignorance and partly to vested interests. But regardless of the reasons neither big business, nor labor, nor the farmers believe in a free-enterprise system. A paraphrase of Pope expresses the trend in public attitudes.

Monopoly is a monster of such frightful mien
That to be hated needs but to be seen (Sherman Law 1890)
But seen too oft, familiar with her face
We first endure (Rule of Reason 1911; *U.S.* v. *U.S. Steel Corporation*, 1920), then pity (Federal Trade Commission trade practice conferences and codes; trade association activities, etc.), then embrace (NRA).

Big Business has failed to distinguish between free enterprise and private enterprise and apparently is unwilling to admit that the former is essential to the preservation of the latter. Whether this is due to ignorance or hypocrisy does not affect business' stubborn insistence that it must be left alone. The most recent illustration is the National Association of Manufacturers' characterization of the Federal Trade Commission's recommendation for amending Section 7 and 11 of the Clayton Act as a witch hunt.

Labor professes to oppose business monopolies, but shouts to high heaven against any proposal to curb its own monopoly power.

Farmers have become so used to subsidies for output restriction and destruction that they regard them as constitutional rights.

Under these circumstances not the failure of antitrust but the basic vigor of competition is amazing. Between 1911 and 1930 the oil industry's monopoly had been transformed into competition so ruinous that the states stepped in to forbid it. Between 1897 when the Supreme Court came to the rescue of the sugar trust (E. C. Knight case) and the late 'twenties sugar refining had become highly competitive—American control having declined from 97 per cent to about 40 per cent—and the industry was "demoralized" by "ruinous" competition.

Bear in mind that the technique of competitive readjustment is ruin and bankruptcy, but among modern social groups nobody wants to be the sacrificial lamb even for the good of the tribe.

If we really wanted a competitive economy it would be necessary to:

1. Revise our patent laws so as to give venture capital easier access to modern technology.

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having more rather than fewer competitors. I trust, however, that I have successfully argued that the strong case for having four rather than two competitors can only be upset by a clear showing that the lesser number is absolutely essential to realize the advantages of mass production, or to overcome otherwise inescapable economic weakness. It is my impression that the showing in question is more often assumed than made.—D. M. K.

2. Prohibit mergers so as to make business firms as small and numerous as is consistent with the economies of mass production.

3. Require federal incorporation for firms the assets of which exceed a specified minimum and which do business in interstate commerce, and limit the use of the holding corporation.

4. Supply more adequate funds for the enforcement of antitrust. Eternal vigilance is the price of liberty.

5. Curb labor monopolies. Specifically, prohibit industry-wide bargaining. The ideal unit of bargaining would probably be the firm and the size of the firm would be limited in accordance with the principle set forth under (2) above.

6. Lower tariffs.

7. Through monetary and fiscal policies, stabilize the general price structure; but leave individual prices to seek competitive levels and perform their proper function of allocating resources and distributing income.

8. Curb monopolies of prestige created by advertising where the main effect is to increase costs by diverting customers from one product to a substantially similar product. This might involve limiting or taxing advertising expenditures, government grading to prevent misleading advertising, or service by a Bureau of Standards like that of Consumers' Research.

In brief, it would be necessary to create an environment conducive to the operation of a free economy. If we could solve the problem of industrial stability, *i.e.*, insure an expanding economy, the readjustments in use of resources which competition would require would be relatively painless.

This obviously is a big order and while the broad goal is generally attractive—a maximization of economic freedom, a high level of employment and income, and economical use of productive agents—its specific objectives encounter serious obstacles on every hand.

Myron W. Watkins

New York City

Viewed from the standpoint of the goal at which the antitrust laws aimed (the past tense is deliberate; it's difficult to say what they aim at now, particularly after the Miller-Tydings amendment!), the accomplishment has been meager, I agree. But if one were to speculate on where we would have come out without antitrust, he could hardly conclude that the results have been negligible. Even more industries under the thumb of big business, even more gigantic mergers than those we know, and an even tighter web of collusive restrictions than enmeshes us, these would be our lot. A quarter of a loaf is better than none; but it's not as good as half a loaf!

The explanation of the shortcomings of antitrust, however big or little one regards them, is complex and the ranking of the factors depends on the way one frames the problem. Some people might be content with an explanation that ran mainly in terms of public apathy. Others might find the chief

cause in business obtuseness, callousness, or cupidity. Still others would probably put the principal emphasis on technological "resistance."

For myself, a more significant explanation would be one that took each of these factors as a datum, simply phases of the assumed conditions that serve as a point of departure for the inquiry. Given *some* public indifference, given *some* business obstinacy and trickiness, given *some* technological obstacles, why has antitrust been less effective than it might have been? So framing the issue, the courts, the Congress, and the executive all have a good deal to answer for; and considering the possibilities of independent, constructive action I would distribute responsibility in about that order. In a whole string of cases from the Knight fiasco through Oil and Tobacco, American Can, Shoe Machinery, Steel, Harvester, Swift, International Shoe, to Alcoa, either a different judgment or a different decree might have shaped a different structure for American industry. The significance of Knight, Steel, and International Shoe, for example, reached far beyond the position of the immediate defendants.

Moreover, if judicial interpretation and application of the antitrust laws had been bolder and more clear-sighted, I have a strong feeling that Congress would have been less lethargic. A more constructive judicial record would, I believe, have encouraged Congress to push forward (as it did feebly in 1914 after the *outward* "success" of 1911) on the path of supplementation of antitrust policy. Such a development was indispensable, if antitrust were to become something more than folklore. Patent law, trade mark law, fiscal law, corporation law, in these and other fields, but pre-eminently in these fields, Congress has done nothing, where it might have done much, to bolster antitrust. Indeed, it is hardly too much to say that in each of the fields mentioned Congressional inaction—failure to support antitrust—has been tantamount to sabotaging it.

Bethuel M. Webster

Webster, Sheffield & Horan, New York City

I do not agree that the antitrust laws "have done relatively little since 1890 to protect and preserve a broadly competitive system," or that the results have been negative. It is my view that, while business has grown and flourished under the antitrust laws, it has grown and flourished to a very large extent in a competitive atmosphere. For example, despite the 1941 convictions at Lexington, the tobacco industry, operating under the stringent decree made in 1911, puts out a fine product at low cost in a highly competitive market. One needs only to read the ads or listen to the radio to know that there are four or five major companies and several lesser companies engaged successfully in the struggle for business. The same is true of automobiles, movies, electrical appliances, chewing gum, etc. In the *National Lead* case, recently decided by the Supreme Court, it appeared that, while du Pont and National Lead had 90 per cent of the titanium pigment business (based on patents which they originated and on cartel agreements which the Court

found illegal), subsidiaries of American Cyanamid and Glidden had entered the field and were gaining on the larger producers; meanwhile, there was a terrific struggle between du Pont and National Lead for customers and orders, though the prices of their similar products were substantially identical.

It is the fashion to say that the antitrust laws have never been enforced, or at least that they were not enforced until Thurman Arnold undertook to enforce them in his unique way, and that they have failed to protect and preserve a competitive system. This may be true in the sense that in 1890 Congress did not foresee the enormous industrial development ahead and that the Sherman Act was not calculated to, and has not, protected and preserved a decentralized economy consisting of many small independent units. (Business is unquestionably Big and getting Bigger.) The legislation of the "New Freedom" of 1914 was intended to have such an effect, but by that time industry and business in general had developed in such a way and to such an extent that the Clayton and Federal Trade Commission Acts could not effectively arrest the trend.

The word "negative" is frequently used in this connection. It means different things in different contexts, but to me it means nothing if it suggests that the deterrent effect of the laws has been insubstantial. I think that, by and large, businessmen, even big-businessmen, desire and try to obey the law, and whether they wish to obey or not are required to make their plans and act with reference to the law. This is an important positive effect, just as the effect of the Securities and Exchange Act, or the laws against issuing false statements, or indeed any other law having commercial application, establishes a public policy to which business generally conforms.

Summary Observations

I take it that the participants in this symposium are in general agreement that the antitrust laws (and their enforcement) have not been without influence in shaping the structure and performance of the American economy. The influence which seems to have been most clear-cut is that of blocking agreements between enterprises in the same line of business to fix prices and other terms of sale of products which otherwise would be competitive in these particulars.

I take it that it is equally clear that there is not agreement among the participants as to whether or not the influence of the antitrust laws has been such as to "preserve a broadly competitive system in the United States." Opinion here ranges all the way from a feeling that the laws have been successful in this regard to a feeling that they have been so unsuccessful that it is unwise to rely upon them longer as a major device to make business serve the public interest by responding fully to the dictates of competition.

As one cruises back and forth over this remarkably broad range of opinion one fact seems to emerge with increasing clarity. This fact, stressed directly or indirectly by participants in the discussion, is that the concepts of competition and of a "broadly competitive system" are so diverse that they offer wide latitude for difference of opinion as to the effectiveness of the antitrust laws in preserving and protecting such a state of affairs.

More specifically, in the going concepts of competition there seem to be two major ingredients which are mixed in quite variable proportions. One is performance in buying and selling. The other is the number and relative size of the participants in this process. Thus, according to one going concept of it, competition approaches zero as the number of competitors moves the last few numbers in the same direction. In another concept, the competition may not even get really lively until a few giants are left alone in the ring to slug it out.

It is not my intention even to try to resolve what at times may obviously be a confusing conflict between these concepts, and a conflict which I am sure has afflicted me personally. Both concepts seem to me to have their use, with the element of size and power being perhaps particularly important in trying to gauge the kind of economy that is safe for democracy. That is where my personal interest in the antitrust laws has its mainsprings.

My purpose is simply to note that until we expose the various and complicated strands of our concepts of competition, and then put them together in a clear-cut design which we all understand and accept, our chances of charting clearly how well we are doing in preserving and protecting competition will be seriously compromised. Likewise, until we know much more than now appears to be known about relationships between size, industrial and corporate, and technical efficiency it seems to me that efforts to preserve a competitive system without paying excessively in the form of industrial inefficiency will go forward in a deep fog.

One of the participants in this symposium asserts that "a choice must be made between (1) firms of the most efficient size but operating under conditions where there is inadequate pressure to compel the firms to continue to be efficient and pass on to the consumer the benefits of efficiency and (2) a system in which the firms are numerous enough to be competitive but too small to be efficient." Scarcely less explicitly other participants deny that any such disagreeable choice is necessary. In most industries it does not appear to me that a full appeal to the facts has been made.

In the meantime, there appears to be substantial agreement among the participants that antitrust laws would have accomplished much more than they have accomplished in attaining their ends if there had not been shortcomings such as judicial bungling of economic problems, conflicts, inconsistencies and loopholes in administration, and inadequate support for enforcement. In some cases the remedies for these shortcomings look difficult. If it is true, as one participant asserts, that the courts alone possess enough prestige to have a chance to enforce the antitrust laws effectively, elimination of judicial bungling of the economic problems involved is not likely to be a speedy process. Economic education is not a high-speed acquisition. Likewise, the problems presented by pressure groups bent upon gutting the antitrust laws have no easy or simple solutions.

However, if there is a chance of doing an effective job in the field of antitrust law enforcement (I am not yet persuaded that there is not), it will certainly be greatly enhanced by economic analysis of the problems involved which is more firmly buttressed factually. If there is no chance of

effective enforcement, then such analysis should make for a cleaner and more constructive break with a bootless policy and program. Analysis of this sort lies pre-eminently in the province of the membership of the American Economic Association. Antitrust laws are peculiarly an American invention, and I feel one of our most notable contributions to the evasive art of directing business operations consistently to the enhancement of the public welfare.

COMMUNICATIONS

Price Flexibility and Full Employment: Comment

I should like to suggest two corrections in Mr. Don Patinkin's article "Price Flexibility and Full Employment" in the September, 1948 issue of the *American Economic Review*.

1. Mr. Patinkin points out that Pigou's proposition that a decline in the price level will reduce savings and stimulate employment by increasing the real value of cash balances implies a special definition of "cash balances." The "cash balances" relevant to Pigou's argument consist of "the net obligation of the government to the private sector of the economy." This departure from usual definitions of money is necessary because to the extent that money is backed by bank loans and discounts the gains of deposit holders from a decline of prices are offset by the losses of bank debtors. The cash balances relevant to Pigou's analysis are denoted by M_1.

There follows a statement of considerable importance for monetary policy. Speaking of open-market operations Patinkin says: "Since these operations merely substitute one type of government debt (currency) for another (bonds), they have no effect on M_1, and hence no direct effect on the amount of savings" (p. 551).

This statement is incorrect if the open-market operation has any effect on the market prices of government bonds, as is likely to be the case. Open-market purchases would increase M_1, even if private holdings of government debt are valued at par or in some other conventional way. They would increase M_1 even more if the government debt is valued at market prices. Thus, suppose that before the open-market purchases the private sector holds \$10 billion of currency and government bonds worth \$100 billion at par and also at market. M_1, = \$110 billion. The government buys \$20 billion, par value, of the bonds, and in the process drives up their price so that it pays \$21 billion for its purchases and at the end of the operation bonds stand at 110 in the market. If bonds are valued at par for the purpose of measuring M_1, M_1 will have increased to \$111 billion (\$31 billion currency plus \$80 billion bonds). If bonds are valued at market, M_1 will have risen to \$119 billion (\$31 billion currency plus \$88 billion bonds).

Mr. Patinkin's analysis does not postulate any floor to interest rates above zero. If we then assume a world in which all government interest-bearing debt is in the form of consols there would seem to be no limit to the increase in M_1 that can be brought about by open-market purchases so long as any government interest-bearing debt is outstanding. Open-market purchases could push the yield of the consols down toward zero, raising their aggregate market value toward infinity.

If this analysis is correct, open-market operations are a third way of increasing real cash balances in addition to the two mentioned by Patinkin,

falling prices and government deficits. This third method has important mechanical and political advantages that make it a valuable ingredient of stabilization policy.

2. Mr. Patinkin defines M_1 as "the sum of interest- and noninterest-bearing government debt held outside the treasury and central bank" (p. 551). This definition is used in the measurement of M_1 on page 559. The definition is defective in its treatment of gold and federal debt held by the Federal Reserve Banks. Under this definition an inflow of gold, increasing the public's deposits and member bank reserves would not increase M_1. Neither would M_1 be increased if the Treasury sold securities to the Federal Reserve using the proceeds to pay individuals who hold deposits. If the Federal Reserve is to be treated as part of the government, the Federal Reserve's liabilities, including member bank reserve balances, should be treated as government liabilities. If the Federal Reserve is not to be treated as part of the government, the government's liabilities should include its liabilities to the Federal Reserve.

M_1 would be better defined as gold stock plus federal debt (interest-bearing and Treasury currency) held outside Treasury, minus Treasury deposits at Federal Reserve and other banks. Alternatively, looking at the Federal Reserve as part of the government, we get M_1 equal to money in circulation plus federal debt held outside government and Federal Reserve Banks (this is Patinkin's definition) plus member bank reserve balances, plus non-member bank deposits at Federal Reserve, plus "other Federal Reserve Accounts," less Treasury deposits outside Federal Reserve Banks less Federal Reserve credit other than U. S. governments. These two definitions are identical.

HERBERT STEIN*

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Price Flexibility and Full Employment: Reply

1. Both of Mr. Herbert Stein's corrections are well taken, and I am glad to have them on record. There are just a few comments I would like to make.

Mr. Stein seems to be hesitant about evaluating at market prices those bonds remaining unsold. I think this should definitely be done; so, in the example he offers, M_1 should be considered as increasing from $110 to $119 billions. Once we adopt this approach, the possible effects of open-market purchases become still greater; for, through its effect on the interest rate, the government will also change the value of assets other than government securities.

Even apart from this last point, it should be recognized that the changes in M_0 and M_1 will not in general be equal. In the case of open-market purchases, the increase in M_0 equals the total amount of money expended for the purchase of the bonds; the increase in M_1 equals the increased value of assets (both of those bought and those not bought by the government) caused by the open-market operations. Corresponding statements can be made for open-market sales.

To finish up with Stein's first point, I would dispute the emphasis in his statement that "open-market operations are a third way of increasing real cash balances in addition to . . . falling prices and government deficits." Nominally, Stein is correct. Actually, open-market purchases which bid up bond prices are just a special form of deficit financing. When the operation is completed, the total amount of government debt (interest- as well as non-interest-bearing) has increased. All that has happened is that the composition of the debt has changed. Any criticism levelled against deficit financing via, say, tax remissions, can also be used against open-market operations.

2. In the original article, the definition of M_1 given in §6 refers to an economy in which all bank reserves consist of hand-to-hand currency. Unfortunately, this definition was carried over to the analysis of our own economy (pp. 558-59), where there are also debtor relationships between the Federal Reserve System and the private sector. Stein's modifications of the definition of M_1 allow for these relationships. Milton Friedman has also suggested that postal savings be included.

Even these modifications do not solve all the problems of defining M_1 in an economy as financially complicated as ours. What about state and local bonds? I think these should be excluded because of the ultimate necessity of these local governments to balance their budgets. What about bonds of government corporations? I think these should also be excluded, for the same reason. In any empirical study of the effects of changes in M_1, these and other complicated problems will first have to be solved.

These changes in the definition of M_1 require the recomputation of the data on page 559 of the article.[1] In order to be perfectly clear about the steps used in the computation, I shall first explicitly state the definition of M_1 used, at the expense of repeating some of the material in Stein's note: M_1 equals:

(1) money in circulation outside the Treasury and Federal Reserve System
(2) *plus* market value of government interest-bearing debt held outside government agencies and the Federal Reserve System
(3) *plus* member bank deposits in the Federal Reserve System
(4) *plus* non-member bank deposits in the Federal Reserve System
(5) *plus* other Federal Reserve accounts
(6) *minus* Reserve Bank credit outstanding, excluding that based on Reserve Bank holdings of U. S. government securities
(7) *minus* Treasury deposits in member and non-member banks
(8) *plus* postal savings

Data on these series were collected[2] to yield the following figures for net

[1] The study referred to in footnote 19 of the article must also be revised. This has not yet been done.

[2] Data on all these series, except for (2), (7), and (8), can be obtained from *Banking and Monetary Statistics*, p. 368. On pp. 360-67 of this book their interrelationships are discussed. For (7) see *ibid.*, pp. 34-35. For (8) see *Statistical Abstract of the United States: 1947*, p. 419.

Being unable to find an official series for (2), I used the following procedure: Total

real balances in the years 1929-1932, respectively: $16.6, $17.1, $20.3, and $24.2 billions. These results give even less encouragement than the original ones for faith in the usefulness of the Pigou effect as a policy measure. They show that real balances increased every year of the period, while real national income continued to fall. The year-to-year *increases* of net real balances for this period were 3%, 19%, and 19%, respectively; these were matched by corresponding *decreases* in real national income of 15%, 13%, and 18%, respectively.

Before accepting the Pigou effect as a useful tool of policy, it would seem reasonable to require that a 46% increase in real balances should show at least some salutary effects. This is exactly the percentage increase that took place over the period 1929-32. Yet it was accompanied by a *decrease* in real national income of 40%. To say the least, such evidence should make one hesitant about advocating the Pigou effect as a practical policy measure.[3] True, the above data do not take into account what happened to the real value of all assets during this period (*cf.* §5, especially footnote 6, of the original article). But, with respect to policy, monetary assets (as represented by M_1) are the only ones over which the government has any control. Hence, the case for the Pigou effect must stand or fall on the response of the economy to changes in the real value of monetary assets alone. On this question the available evidence seems definitely in the negative.

DON PATINKIN*

outstanding government debt at face value was classified according to maturities (0-5 years, 5-10, and over 10) on the basis of *Banking and Monetary Statistics*, p. 511. These classifications were multiplied by price indexes for government bonds with maturities of more than 3 and less than 4 years, more than 6 and less than 9, and more than 10, respectively (Standard and Poor, *Statistics: Security Price Index Record: 1948 edition*, pp. 139-44). The sum of these products was used as an estimate of the market value of the total government debt. The ratio of this to the face value of the total debt was computed, and this ratio applied to the face value of government debt held outside the Treasury and Federal Reserve System (*Banking and Monetary Statistics*, p. 512) to yield an estimate of the required series.

[3] In particular, I feel that Milton Friedman's policy proposals in his "A Monetary and Fiscal Framework for Economic Stability" (this *Review*, June, 1948, pp. 245-64) give entirely too much of a central position to the Pigou effect (*cf.* especially *ibid.*, pp. 259-61).

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Geometrical Measurement of Elasticities

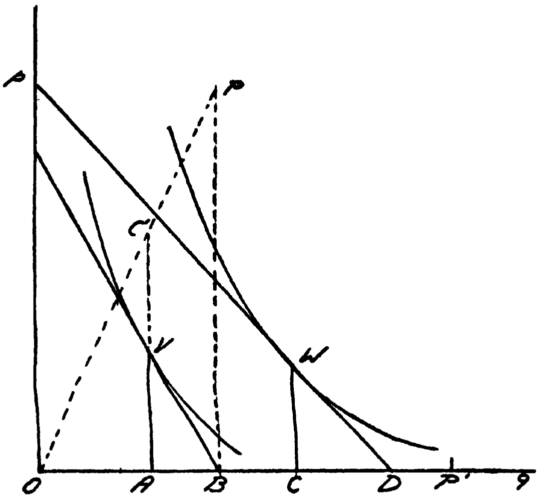
Messrs. John S. Henderson and Abba P. Lerner, in notes presented in *The American Economic Review*,[1] have suggested methods of geometrical comparisons of relative point elasticities on different curves.

When comparing the point elasticities of two demand curves, it is sometimes

[1] John S. Henderson, "Geometrical Note on Elasticity of Demand," *Am. Econ. Rev.*, Vol. XXXVI (Sept., 1946) pp. 662-63.

Abba P. Lerner, "Geometrical Comparison of Elasticities," *Am. Econ. Rev.*, Vol. XXXVII (March, 1947) p. 191.

desirable (under a controlled marketing program, for example) to know not only which of the two elasticities is larger, but the ratio of the elasticities. Comparison of relative point elasticities on two demand curves by the ratio of two length ratios may be confusing. The following method is suggested to reduce the ratio of the elasticities to a single ratio of two line segments, illustrated by the diagram shown below:



The elasticity at V, $E_v = \frac{AB}{OA}$, the elasticity at W, $E_w = \frac{CD}{OC}$. With O as center swing an arc equal to OC cutting AV extended at C'. At B erect a perpendicular and extend to cut OC' extended at P. Since BP is parallel AC', $\frac{AB}{OA} = \frac{C'P}{OC'}$ (a line drawn through a triangle parallel to the base divides the sides proportionately), or since OC' = OC, $\frac{AB}{OA} = \frac{C'P}{OC}$. Then, with C as center, and C'P as radius, swing an arc cutting the q axis at P'.

Thus $E_v = \frac{AB}{OA} = \frac{CP'}{OC}$, and $E_v : E_w = \frac{CP'}{OC} : \frac{CD}{OC}$ or $E_v : E_w = CP' : CD$.

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MEMORIALS

Wesley Clair Mitchell
1874-1948

On December 28, 1947, at the sixtieth annual meeting of the American Economic Association in Chicago, Wesley Clair Mitchell received the first award of the Francis A. Walker Medal for pre-eminent contributions to economics during a lifetime of distinguished service. In a graceful tribute President Douglas expressed the admiration and affection in which Professor Mitchell was held by the economists of America. Mitchell's death came ten months later. It is a source of deep satisfaction to all members of the Association that opportunity was given while Mitchell was yet alive for the expression of our feeling for him, and for the acknowledgment of our indebtedness to him. We knew then, as we know now, that the award was made to one of the great figures in the history of our science.

I

Wesley Clair Mitchell was born in Rushville, Illinois, on August 5, 1874. His father was a country doctor who had served as a surgeon in the Union Army during the Civil War. The family was of New England stock, and although a Middle Western boyhood and later adult years in California and New York left their impress on Mitchell, something of the New England strain was always discernible in the pattern of his thought and life. His father's practice, which was limited by the effects of wounds received during the war, was combined with the management of a fruit farm on which the seven children worked during their early years.

Mitchell's pre-college schooling followed the pattern of the times, but home influences and his own native qualities contributed to produce a mind that was keen, sensitive, and richly stocked before he left the farm for college work. He had an abiding love of poetry and a delicate awareness of the subtleties of speech and the rhythms of the English language—qualities that must be acquired early, or not at all. His youthful training in logic he has described with singular charm. Christian theology was the instrument on which he polished his youthful wits, and a well-loved grand aunt was the protagonist of this theology.

> She was the best of Baptists, and knew exactly how the Lord had planned the world. God is love; he planned salvation; he ordained immersion; his immutable word left no doubt about the inevitable fate of those who did not walk in the path he had marked. Hell is no stain upon his honor, no inconsistency with love. . . . I adored the logic and thought my grand aunt flinched unworthily when she expressed hopes that some back stairs method might be found of saving from everlasting flame the ninety and nine who are not properly baptized. But I also read the Bible and began to cherish private opinions about the character of the potentate in Heaven. Also I observed that his followers on earth did not seem to get what was promised them here and now. I developed an impish delight in dressing up logical

difficulties which my grand aunt could not dispose of. She always slipped back into the logical scheme, and blinked the facts in which I came to take a proprietary interest.[1]

The young University of Chicago offered rich fare to a mind thus prepared. John Dewey provided a kind of logic that was far removed from that of nineteenth-century theology, and a way of regarding the operations of the human mind that was a revelation to the young student. "It is a misconception to suppose that consumers guide their course by ratiocination—they don't think except under stress. There is no way of deducing from certain principles what they will do, just because their behavior is not itself rational. One had to find out what they do. That is a matter of observation, which the economic theorists had taken all too lightly."[2] Thorstein Veblen provided edification of another sort for the youthful agnostic with a weakness for subtle paradoxes. Veblen's influence on Mitchell was profound (the paper on "Industrial and Pecuniary Employments" provided insights that helped shape the study of business cycles and much of Mitchell's later thinking); but the young student could view Veblen, too, with detachment, enjoying his brilliant expositions and sardonic style while appreciating that this, also, with all its penetrating suggestiveness, fell short of sound craftsmanship. ("How important were the factors he dealt with and the factors he scamped was never established.")

Somewhat more conservative approaches to economics were open in the well-documented course of Adolph C. Miller on English economic history, and in J. Laurence Laughlin's offerings in money and banking. Mitchell's first serious investigations and his early undertakings as a teacher reflected Laughlin's influence. His study of the greenbacks stemmed directly from Laughlin, and Mitchell was first introduced to the phenomena of business cycles in Laughlin's courses. One other of Mitchell's teachers of economics, William Hill, played a formative role at this stage. An assignment by Hill of a course paper on "Wool Growing and the Tariff" sent Mitchell first to the reading of tariff speeches—an illuminating experience in its own right—and thereafter to his first comprehensive job of data gathering. Mitchell's native agnosticism was strengthened by the contradictions he found between his statistical conclusions and the notions he encountered in Congressional and academic discussions of the tariff.

Unsystematic but fairly extensive readings in anthropology (instigated by Veblen) and some systematic course work in psychology carried Mitchell beyond the programs of study followed by most students of economics. This period brought, too, first contacts with Jacques Loeb, the brilliant physiologist. Loeb's studies of the phenomena of behavior at both the physiological and

[1] Letter from W. C. Mitchell to J. M. Clark, published in *Methods in Social Science*, edited by Stuart Rice (Chicago, 1931), p. 676.

Years later, on declining an invitation to make some laudatory remarks that would have been hypocritical, Mitchell said that only once in his life had he expressed views that did not represent his convictions. He had made this one departure from probity to ease his grand aunt's forebodings.

[2] *Ibid.*, p. 677.

psychological levels influenced Mitchell not only in their substance, but as illuminating examples of scientific method. Loeb gave Mitchell positive, first-hand acquaintance with rigorous methods that were clearly fruitful in studying one aspect of organic behavior. Mitchell was prepared to appreciate their potential fruitfulness in dealing with other aspects of behavior. Here were instruments that offered something positive and satisfying to a mind rendered skeptical by early predilections, by Veblen's biting critiques, and by Dewey's iconoclastic treatment of conventional attitudes toward processes of thought. Loeb's influence on Mitchell, confirmed and strengthened through later association at California, was deep and lasting.

In this background we have some explanation of Mitchell's ability to get outside the framework of traditional economics, to view with a fresh eye the problems economists set themselves and to appraise from a fresh viewpoint the methods employed by economists in attacking these problems. The projection of these factors helps, too, to explain Mitchell's characteristic attitudes in later years, and his own choice of problems and methods.

Mitchell's undergraduate and graduate studies at Chicago were broken by an interim period of one year spent at Halle and Vienna, where he attended lectures by Johannes Conrad and Carl Menger. There is no evidence that this experience had any material influence on Mitchell's thinking. His outstanding qualities as an economist were distinctive of procedures and ways of thought that had their characteristic development in this country.

Mitchell's doctorate was completed at Chicago in 1899, his thesis being a *History of the Legal Tender Acts of 1862 and 1863.* Thereafter came a year at the Office of the Census and two years at Chicago as instructor in economics. During this period his doctoral dissertation was expanded to become a *History of the Greenbacks,* a notable study in itself and a point of departure for much of Mitchell's later work.

In 1903, Mitchell moved to the University of California at Berkeley to begin a decade of fruitful work and of steady personal growth. His tools of research were sharpened and his mastery of them perfected. His brilliant greenback studies were extended. But the confines of this enterprise were too narrow, and Mitchell soon laid it aside. (*Gold, Prices and Wages Under the Greenback Standard* contains basic data he thought it well to make available to other scholars, with explanatory notes, but the material was not fully exploited.) Some of the essential problems with which he was concerned in his first studies persisted, but Mitchell sought to solve them in a much wider framework, analytical and observational. The massive monograph on *Business Cycles,* one of the great products of scholarship in the social sciences, was the result.

The labors that led to the solid contributions of these California years did not preclude other activities. This was a rich period in Mitchell's life, to which he always looked back as something of a personal golden age. A young man intellectually somewhat aloof and inclined toward austerity mellowed in the sunshine of the West and in the easy, pleasant companionships of the young University. His associations within and without his own department were congenial. An active Philosophical Union helped to provide

intellectual fare. He took to the Sierras avidly, relishing the free ways, the free language and the physical release to be found in mountain climbing. A companion of those days says that Wesley's inhibitions were peeled off like the layers of an onion as successive altitude levels were passed. He found a wife, too, in the West; when he left California he took with him the Dean of Women of the University.

Mitchell ended his term at California in 1912. Marriage and the completion of his Cycles study combined to mark the end of one period of his life and the beginning of another. His own professional desires and the interest he and his wife shared in problems of education were both served by a move to New York. There was a break of one year which was spent abroad; final tables for *Business Cycles* were prepared at Berchtesgaden, when that word meant merely a beautiful spot in the Bavarian Alps.

On his return to the United States in 1913, Mitchell began his service in the Faculty of Political Science at Columbia. The department of economics was small in those days. J. B. Clark was still meeting students occasionally; Seligman, Seager, Simkhovitch and Moore were the continuing members of the teaching staff when Mitchell joined it. None who attended Mitchell's courses in those early years will forget the sense of excitement and anticipation with which one entered a class. Mitchell was giving a course on Business Cycles, a reflection of his continuing research interests. Equally stimulating to the students of that day was his new offering on Types of Economic Theory. Mitchell's early discontent with economic theory, a discontent clearly manifest in his own account of his student days,[3] had been combined with a sense of the need of generality if we are to have adequate explanations of complex reality. There was a conviction of need, a profound unhappiness over what was offered. *Business Cycles*, indeed, had been regarded by Mitchell as an introduction to economic theory. The completion of that study gave Mitchell opportunity to turn to a more systematic review and appraisal of theory than he had yet undertaken. This he did in the years following 1913, and the members of his small classes had opportunity to join in this review with him.

The content of this course varied somewhat from year to year. In its early form it included expositors of English classical doctrines through Marshall;

[3] "Men had always deluded themselves, it appeared, with strictly logical accounts of the world and their own origin; they had always fabricated theories for their spiritual comfort and practical guidance which ran far beyond the realm of fact without straining their powers of belief. My grand aunt's theology; Plato and Quesnay; Kant, Ricardo and Karl Marx; Cairnes and Jevons, even Marshall, were much of a piece. Each system was tolerably self-consistent—as if that were a test of 'truth'! There were realms in which speculation on the basis of assumed premises achieved real wonders; but they were realms in which one began frankly by cutting loose from the phenomena we can observe. And the results were enormously useful. But that way of thinking seemed to get good results only with reference to the simplest of problems, such as numbers and spatial relations. Yet men practiced this type of thinking with reference to all types of problems which could not be treated readily on a matter-of-fact basis—creation, God, 'just' prices in the middle ages, the *Wealth of Nations* in Adam Smith's time, the distribution of incomes in Ricardo's generation, the theory of equilibrium in my own day." (From letter to J. M. Clark, Rice, *op. cit.*, p. 678.)

Jevons and Walras; Sombart, Schmoller, Schumpeter and von Wieser; Fetter, Davenport, and, extensively, Veblen. The treatment of each author studied dealt with the substance of that man's thought, and with the social and intellectual setting of this thought. At a later time Mitchell wrote, "Scientific progress consists largely in this process of taking thought about what had theretofore been taken for granted. As any science grows it keeps turning back upon itself in this fashion, and thus becoming conscious of more and more elements in its structure."[4] Mitchell's native skepticism, his excursions into anthropology and psychology, and his ability to look at traditional economics with an objective perspective admirably fitted him to deal thus with the postulates and preconceptions of various types of theory.[5]

In the conduct of this course Mitchell played the part of a detached and skillful expositor, a leader of discussion, a stimulator of critical appraisal. His treatment of his class was gracious, stimulating; his interpretations were illuminating revelations to most of us. The facts of social history, the character of the climates of political opinion that dominated the years when particular theories were taking shape, and the threads of philosophical thought that ran through these years were developed systematically as the assumptions of different theorists, conscious and unconscious, were laid bare. Mitchell's own views were subordinated, except in his closing lectures, although they were inevitably revealed by implication and indirection. It was clear that a genetic explanation of economic phenomena was congenial to Mitchell's thought; that rationalistic assumptions were suspect; that understanding of economic behavior was to be sought through a study of human motivation at the level of the instinctive and the unconscious as well as at the level of rational activity; that institutions, "prevalent social habits," were at once controllable and controlling in the processes of economic life; that economics could play a major role as a positive instrument of human progress.

This course, like every course that Mitchell gave, was an adventure in education. Mitchell possessed in high degree the qualities of a good teacher. There was insight in his analyses; there was a freshness of view that he never lost; there was lucidity of thought and expression, and masterly orderliness of exposition; there was a sense of sharing with the student the task of inquiry. Above all, perhaps, was the sense of integrity. Here was a man without affectation, without pretense, who honestly sought understanding.

Mitchell's reputation had been established by the time he came to Co-

[4] "Postulates and Preconceptions of Ricardian Economics," reprinted in *The Backward Art of Spending Money and Other Essays* (New York, 1937), p. 205.

[5] His distinction between logical postulates, which are consciously recognized and taken for granted, and preconceptions—convictions that shape the general trend of a man's thinking without being themselves submitted to critical scrutiny—is revealing for the light it throws on Mitchell's ever-present suspicion of rational processes. "We take postulates up, play with them, and drop them for others. They are external to us and we feel no affection for them. But preconceptions are parts of us. They grow up in our minds. We are but dimly aware of the role they play in shaping our conclusions about the matters on which we focus attention. . . . Even in our most rigorous work we are influenced by them." *Ibid.*, p. 205.

lumbia; he had reached full scholarly maturity. Yet his growth continued and his accomplishments multiplied. A steady (but not a voluminous) flow of papers, reviews, addresses and more extensive studies came from his pen. Into each, whether brief or extended, went care in the construction of a logical and orderly argument, skill in the marshalling of evidence, and objectivity in the use of that evidence. Each, too, was in exposition a work of craftsmanship by a man who used the instrument of language with sensitivity and precision.

There was also an almost uninterrupted series of public and professional services and of accumulating honors. He was chief of the Price Section of the War Industries Board during the first World War, chairman of the President's Committee on Recent Social Trends, a member of the National Planning Board, the National Resources Board, and the Federal Emergency Administration of Public Works, and chairman of the Committee on the Cost of Living when that burning issue threatened to check the steady production of goods during the second World War. There was the launching in 1920 and the directing for a quarter of a century of a new instrument for the advancement of knowledge—the National Bureau of Economic Research, an institution which in very truth is the lengthened shadow of Wesley Mitchell. Over a long stretch of years he helped to break down the barriers between the social sciences and to unify their activities in the Social Science Research Council. He was one of those who founded and shaped the New School for Social Research. Counsel and guidance were given over many years to the Bureau of Educational Experiments. He was called upon to direct the affairs of professional societies, serving as President of the American Economic Association, the American Statistical Association, the Econometric Society, and the American Association for the Advancement of Science. There were elections to learned societies at home and abroad. Honorary degrees came from the University of Paris and from major universities in this country. These were rich honors and they were not unwelcome; but he remained to the day of his death a modest scholar, who would both gladly learn and gladly teach.

II

The general pattern of Mitchell's work as an economist was foreshadowed in his *History of the Greenbacks*. There was broadening, diversification, and enrichment in subsequent activities, but in notable degree later developments were natural outgrowths of the play of a questing mind on a set of problems first attacked in the greenback study. These problems were products of contemporary conditions—the long period of price decline and debtor difficulties that generated the cross-of-gold speech, the free-silver program, and the sound-money controversy of the McKinley-Bryan campaign. This price decline provided the great economic issue of that day. Its causes were furiously debated within and without academic halls. Francis A. Walker and J. Laurence Laughlin, Mitchell's teacher, were adversaries in a sustained debate on the quantity theory of money. Mitchell's first published paper, written as an undergraduate, was a contribution to this discussion, with

Mitchell taking a highly critical view of that theory.[6] It was natural that this should be the path by which Mitchell entered upon serious economic study, and that his first major investigation should deal with the issuance of money and with related price-level and other changes. What is notable, however, is the rapid and steady growth, the passage from an old controversy to realistic research on larger issues and more fruitful phases of the interrelations of money and prices. This growth was steady and cumulative. There is a clear, unbroken thread running through Mitchell's major studies—from the *History* to *Measuring Business Cycles* and to the manuscripts that were left unfinished at his death. Mitchell's life was given to a single great endeavor, pursued tenaciously, imaginatively, flexibly, and unremittingly. In some sense the job was unfinished at his death; the self-imposed task of mastering a vast and shifting body of data was foredoomed to incompleteness; but the incompleteness was the incompleteness of life itself.

Mitchell's concern in his *History of the Greenbacks* was with the economic consequences of the legal tender acts. The pursuit of these consequences led him to an examination of the effects of changes in the purchasing power of the standard money upon the distribution of the national dividend during the wartime boom from 1861 to 1865. The shares in this national dividend, first studied in money terms, through an appraisal of price fluctuations and shifts in relative prices, were then assessed in real terms. Beyond this study of changes in the real incomes of laborers, landlords, capitalists, and business managers lay a broader question—what effects these changes had upon the production and consumption of wealth, again at the level of material things.

In the unfolding story of these four years of monetary depreciation and rising prices we find elements that entered into much of Mitchell's later work: the money level and the real factors underneath; the role of prices and, in particular, the importance of differential price changes in determining the fortunes of different groups; the effects of relative price changes upon profits, and the relations between changes in profits and changes in the rewards of other factors. For a single major phase of wartime expansion Mitchell was seeking to define the sequence of cumulative changes by which depreciation of the standard of values altered the system of money payments and thereby shifted the distribution of real income. But his study was restricted in time and its scope was confined to a limited number of economic processes. Before this and the closely related successor study were finished Mitchell knew that he had not gotten to the bottom of the problems he faced; he had, moreover, learned to see these problems in a larger way.

Renouncing, therefore, the limited study within the period of the greenback episode, Mitchell turned first to a more general analysis of the system of prices. Here, as he followed the interesting ramifications of this subject, he found himself leaving the solid ground of observation behind him and venturing into speculative pronouncements.[7] This was intolerable to a man

[6] "The Quantity Theory of the Value of Money," *Journal of Political Economy*, March, 1896.

It was not many years before Mitchell himself condemned the restricted conception of the quantity theory on which the argument of this paper was based. See "The Real Issues in the Quantity Theory Controversy," *Journal of Political Economy*, June, 1904.

[7] *Cf.* Rice, *op. cit.*, p. 679.

who was always supersensitive to the dangers of unchecked reason. But one phase of the working of the price system was open to investigation in realistic terms—the recurring readjustments of prices in the course of financial crises. These shifts, moreover, bore upon those problems of changing real output and consumption and shifting real incomes that had been objects of central concern in his study of the Civil War expansion. If adequate understanding of these recurring processes might be achieved, a contribution could be made to a kind of economic theory more satisfying than that yielded by introspection and the selective use of limited facts. So Mitchell turned to the study of business cycles.

The subsequent story will not here be told in detail. The search for an adequate understanding of business cycles was a search for valid economic theory. Mitchell's examination of accepted theories, his extended consideration of relevant thought and procedures in other scientific fields, and his own experience as an investigator led to conclusions respecting theory that have been set forth in various papers and that are embodied in his substantive work. Mitchell's persistent interest in the phenomena of business cycles carried through to his death, the two major publications subsequent to the 1913 monograph being *Business Cycles: The Problem and Its Setting,* in 1927, and *Measuring Business Cycles* (jointly written with A. F. Burns) in 1946. The founding of the National Bureau of Economic Research, in which Mitchell was a prime mover, was a direct reflection of Mitchell's deep-seated views as to the means by which adequate understanding might be achieved. The diversity of papers and brief monographs, notably the series of annual reports written by Mitchell as director of the National Bureau, bore continuing witness to the freshness and seminal character of Mitchell's thinking, and reflected the searchings of a continually curious mind for light on the central problems that had concerned him from his early Chicago days. His quest was never finished, but his zest for it was unabated and unflagging.

Mitchell's concern, as J. M. Clark has suggested, has been with problems of concrete behavior. For these he sought interpretations in terms of "analytic descriptions."[8] "A theory of business cycles," he wrote in the Preface to his 1913 monograph, "must . . . be a descriptive analysis of the cumulative changes by which one set of business conditions transforms itself into another set." The theory providing such descriptive analysis would not be exhaustively detailed. The need of abstraction from the complexities of reality is clearly recognized by Mitchell. Conformity to the world about us and usefulness in the understanding of life processes are not inconsistent with conceptual simplicity. Mitchell's goal in the study of business cycles was the derivation of such a theory; his broader objectives were the confirmation of methods by which pragmatically tested theories might be derived and the establishment of agencies by which the research that might lead to such theories could be maintained and assured.

The road that Mitchell followed in seeking to establish theories that would serve as instruments of understanding was a hard road. Looking back over the fruitful years of his life, it is easy to overlook the valleys, the periods

[8] *Cf.* Rice, *op. cit.*, p. 667.

of trial and struggle when refractory reality would not fall readily into patterns that met his own exacting standards. Retreat into the spinning of speculations would have been an easy way out, for a mind as adept at that art as was Mitchell's. But this was a course he did not take. He worked over his materials again and again (". . . I have to do everything a dozen times."); he sought new observations; he experimented with new patterns. Always there was the interplay and interaction of reason and observation; speculations were checked against data, data were organized in ways suggested by speculation. New observations were sought to check ideas suggested by other data; old observations were re-ordered under the play of an imagination that never lost its freshness. If there was one dominant quality in Mitchell it was the tenacity with which this procedure—the interplay of speculative reason and meticulously careful observation—was carried through. It is a procedure to which we all give lip service; Mitchell practiced it.

It is true that always the observations yielded an incomplete structure; always there were challenging new issues; always the work was unfinished. But this was of the essence of the reality from which Mitchell refused to get away. Not even for the aesthetic satisfaction of deriving a harmoniously consistent, logically tight system—and Mitchell was a craftsman who loved nicely articulated structures—would he blind himself to aberrant observations. Not even for the joy of completing a lifework would he ignore any part of the complex reality with which he was dealing. Here was integrity—integrity that kept him at his testing and pattern-making until the day of his death, and that kept beyond his reach that final clean-cut termination of his job for which he had once hoped.

Mitchell framed no vast speculative system. He left no cosmology. No volume of *Principles* bears his name. His substantive contributions are embodied in four major monographs; his influence on economic thought and method was felt through these, through dozens of papers, addresses and reviews, and through hundreds of students. Some of the concepts and beliefs that shaped his research activities have been suggested above:

1. The emphasis on objective behavior as an object of study, as against the "intellectualist fallacy" of the nineteenth century.

2. The conception of economics as one of the sciences of human behavior.

3. A concern with reality, and a conviction that the objective of economics is the understanding of the institutions and processes by which men make their livings. All available instruments to this understanding should be utilized by the economist, but it is the understanding of reality and not the formulation of a body of concepts to be judged in terms of their own internal consistency which is the end-purpose of economics.

4. The belief that pecuniary institutions, and the money economy generally, provide keys of central importance to an understanding of contemporary economic processes.

5. The notion of sequence, the concept of cumulative, consecutive growth, as opposed to the Newtonian concept of equilibrium.

6. "The notion that inquiries should be framed from the start in such a way as to permit of testing the hypothetical conclusions"; profound belief

in the interplay of reason and observation as the way to achieve warranted conclusions.

7. The confidence in statistical measurement as a means of ensuring the cumulative growth of a body of factual knowledge; such quantitative, substantive knowledge would not only provide tests of hypotheses, but would constitute a seed-bed for the germination of new hypotheses.

These ideas (as here listed they overlap, of course) and related concepts that determined Mitchell's choice of problems and modes of study were derived in part from early teachers and from his studies in various fields; in part they reflected personal predispositions; as working instruments of his adult years they represented his own amalgam of thought and observation and his own mature judgments. From their application over half a century by a tenacious, questing, honest mind, actuated by a builder's instinct, came Mitchell's distinctive contributions to the body of economic knowledge, to the methods of economics, and to our present instrumentalities for the conduct of economic and social research.

The nature of these contributions will be the subject of appraisal in subsequent studies by Mitchell's fellow economists at home and abroad. In this brief memorial I suggest only the general nature of Mitchell's impact on the economics of his time.

His substantive contributions were extensive. No man did more to turn economists toward the study of the actual functioning of our economic system. The first great effort on Business Cycles, an extraordinary product of the zeal and energies of one man, yielded knowledge we had never before possessed of the phenomena of such fluctuations; the play of an imaginative and penetrating mind illumined and gave coherence to these phenomena. Subsequently, this body of organized information was extended in a massive and sustained research effort covering more than a quarter of a century. Many contributed to this accumulation and participated in the task of analysis, but Mitchell was the stimulator and the master organizer.

There were concrete contributions beyond the field of cycles. Mitchell was the captain of the team that launched the first comprehensive study of the amount and distribution of the national income. From this came not only a new body of knowledge vital to an understanding of economic activity; an enterprise was begun that was ultimately taken over by the federal government, and that, expanded and developed, provides today a great conceptual scheme for the organization and analysis of the facts of economic life. The growth of the body of concepts and methods relating to national income and the concurrent development of a rich body of organized facts provide an ideal example of the kind of expansion of knowledge in which Mitchell believed and to which he devoted his life.

Finally we must note the additions to our knowledge of the details of the working of the money economy that derive from Wesley Mitchell. Veblen had stressed the role of pecuniary institutions in the behavior of men; Marshall had said that money is "the center around which economic science clusters"; Walras and Pareto had developed a model defining the interaction of prices in the attainment of market equilibrium. And many other economists

had dealt with the money surface of things, often as a surface that obscured the play of real factors. Mitchell found great theoretical significance in the money aspect of economic processes. But to point this out was not enough. Characteristically, he labored to give substance to these ideas. From his earliest greenback study to his latest manuscript Mitchell was providing such substance. Giving realism to the idea of prices as a complex, interrelated system of many parts, with almost organic qualities of growth and change, Mitchell defined the characteristic modes of behavior of important elements of that system. The systematic study of prices, not primarily as specific equilibrium points in a conceptual network of supply and demand schedules but as measurable aspects of economic behavior, began with Mitchell.

Mitchell was a tool-maker, imaginative and ingenious in improving the technical instruments of research. His monograph on index numbers is still a classic in the field. In his own early work he developed novel techniques of cycle study, and he played a continuing part at the National Bureau in the refinement of these tools and the forging of others. He was not a mathematical statistician, but he had a lively interest in this rapidly developing subject and sought to utilize in his own work such of the tools and tests as he could employ with understanding and with assurance that they were relevant.

The perspective of time will be needed for an appraisal of Mitchell's influence on the body of concepts and analytical tools suggested by the term "economic theory." In the revealing letter to J. M. Clark to which reference has been made Mitchell has described his own reaction to the traditional theory of his college days. He was impressed by the danger of speculation on the basis of assumed premises, except with reference to the simplest of problems, such as numbers and spatial relations. Where *phenomena* were to be explained one could not cut loose from them; here the "patient processes of observation and testing—of the relations between working hypotheses and the processes observed" were the roads to understanding. "Romances, utopias, and economic systems" (*i.e.*, systems of economic thought) he loved, but he wanted to become a scientific worker.[9]

Theory, then, as an abstract system of thought which could not be tested against reality, had no place in Mitchell's working equipment. But theories as working hypotheses that can be checked against observations, as analytical devices that facilitate the organization of data, are to be sought and prized. These tools may be specific and limited; they may be comprehensive and far-reaching concepts; indeed an architectonic mind—and this Mitchell had in high degree—would be forever seeking the widest possible framework, the most comprehensive concepts, provided always that the framework fitted reality, that the concepts were open to testing and verification.

The body of ideas on which the economist might draw in deriving working hypotheses expanded, in Mitchell's thinking, as he matured and as his own experience broadened. The social sciences, the biological sciences, the sciences of the mind—all these furnish the economist with fruitful leads. Man's

[9] Rice, *op. cit.*, p. 678.

reciprocal relations with institutions of his own contriving, institutions which he has shaped and which in turn are shaping him, are of central concern to one who is attempting to define patterns of cumulative change in economic behavior and to develop a body of concepts for use in the study of economic processes. This body of concepts will be checked, modified, rechecked and again modified until there is conformity to the circumstances of economic life. A structure of ideas thus developed and thus adapted to reality would provide intellectual tools for the understanding of economic behavior.[10]

Although Mitchell's predilection was toward inductive procedures and constant verification, and although he reacted against the system building of the generation that preceded his own, he recognized virtue in a diversity of approaches to economic problems. He was intolerant of sheer abstraction which masqueraded as an explanation of reality. But for rigorous abstract reasoning as a stage in the process of inquiry he had the fullest respect. There was room in economics for the exercise of many skills; economics was to Mitchell a house of many mansions.

III

To the picture of Wesley Mitchell the tenacious investigator, the brilliant expositor, the inspiring teacher, there must be added a few strokes at least to depict other sides of a singularly balanced human being. There was a Puckish quality in Mitchell reflected in his youthful (and enduring) love of paradox. Even in his advanced years he could view with impish glee Irving Fisher's soberly framed rules of health; he used tobacco with special gusto because Fisher banned it. He enjoyed the play of Veblen's scalpel,

[10] There is no one source in which Mitchell's views on economic theory are set forth in rounded form. Certain of his essays deal more explicitly with these matters than do his extended works. Three papers reprinted in *The Backward Art of Spending Money and Other Essays* are of direct interest: "The Rôle of Money in Economic Theory," *American Economic Review*, Supplement, March 1916; "The Prospects of Economics," from *The Trend of Economics*, edited by R. G. Tugwell, 1924; "Quantitative Analysis in Economic Theory" (Presidential address delivered at the 37th annual meeting of the American Economic Association), *American Economic Review*, March 1925.

To these we might add "Wieser's Theory of Social Economics" (*Political Science Quarterly*, March 1915; also reprinted in *The Backward Art of Spending Money and Other Essays*). In expounding Wieser's theory, Mitchell makes clear many of his own ideas on the scope and character of a useful body of economic theory.

Not explicitly devoted to theory, but of high significance for the light they throw on Mitchell's basic conception of theory, are chapters on institutional settings in his 1913 and 1927 books on *Business Cycles*. In the earlier book the chapter is entitled "The Economic Organization of Today"; in the later, "Economic Organization and Business Cycles."

Mitchell's opinions as they stood in 1918 were rather systematically, although informally, developed in the terminal lectures in his course on Types of Economic Theory, in which he propounded a modern ground plan for economic theory. Notes on these lectures exist, but they were never edited by Mitchell, or approved by him. In these lectures Mitchell sketched a general framework in which economics was presented as one of several sciences of human behavior, the special concern of economic science being the growth and present functioning of economic institutions. Into such a framework all the traditional types of economic theory, as well as types involving other approaches to the study of economic institutions and processes, could be fitted, in Mitchell's view. Most of the orthodox theories, for example, would fit into such a scheme as studies of the logic of pecuniary institutions.

dissecting and undercutting pretentious systems of thought. But his mind was not essentially that of the skeptic, and particularly not that of the mocking skeptic. Having no pretense himself, he could be scornful of pretentiousness. But there was no scorn for honest endeavor, whether successful or not.

Mitchell found deep satisfaction in his home life. He and his wife shared an interest in education, and sponsored one of the most fruitful of the experiments that helped to break the education of the young out of the molds of nineteenth-century custom. He joyed in the companionship of his children. In their New York home and at Huckleberry Rocks, in Vermont, there was a healthy, wholesome family atmosphere. The children were partners of the parents in the life of the Mitchell household. At Huckleberry Rocks, too, there was a workshop to warm the heart of one who respected the arts of woodworking. Here Mitchell could indulge to the full his love of fine craftsmanship. He was as skilled and honest in the tasks of cutting, sawing and fitting a delicate piece of inlay work as he was in assembling economic observations and fitting them into a meaningful structure. Here, also, was his study, with contents ranging from scholarly tomes and slim books of verse to the latest detective fiction, of which contrivances Mitchell was a connoisseur. In this home, in its activities and interests, its responsibilities and its joys, there were wells of contentment for Mitchell. Here were some of the deep sources of his strength.

Wesley Mitchell's life was a full life and he was, in truth, a whole man. He found in life the abiding satisfactions that go with integrity of mind, generosity of spirit, and service to a cause that can draw man out of himself and beyond himself. In his life's work Mitchell served the human race. In his own being he helped to give dignity to that race.

FREDERICK C. MILLS

New York, N.Y.

Harry Alvin Millis
1873-1948

In the opinion of most who knew him personally and of the many more who knew him through his work alone, Harry A. Millis was a man of great and uncommon wisdom. He was a distinguished scholar, a skillful administrator, a creative and judicious arbitrator, and, without peer, a builder of men. Through his teaching, his scholarship, his decisions as an arbitrator, as a quasi-judicial official, as an administrator and an adviser on important matters of national economic policy, he exerted a healthy influence upon the lives of men and women in all branches of his society. Union leaders, company officials, workers in clothing plants, auto plants, print shops, workers in government, lawyers, university professors, students—all looked upon him with respect and admiration—and many with deep affection. In the field of industrial relations Millis will probably go down in history as the person, of his time, with the greatest number of friends and fewest enemies.

Those who knew and worked with him will probably never forget him—the way he looked, his voice, his laugh and the things he said. He was a big man—over six feet tall and his bearing was that of the athlete he was in his youth. When he walked, he walked slowly, looking neither to the right nor to the left, and as one recalls, he seemed forbidding, impressive and remote. To a few he was "Hank"; to most (and not always behind his back) he was "Pop"; to others, affectionately, the "Boss." He could be firm, gruff, and on rare and merited occasions angry; but he was gentle, humorous, and an incorrigible sentimentalist, his grumbling resistance to the contrary notwithstanding. He loved a good story and a pointed anecdote, and his own were pungent and Hoosier-flavored. "Kid stories" featuring his grandchildren were worth repeating and remembering. He was alway a great sports enthusiast, a lover of games, and a college football fan. Even toward the last, he and his grandson, "young Harry," spent long minutes of hospital visiting time debating the relative merits of major league ball players.

It was a familiar sight at Chicago to see his students lining up outside his door after those eight o'clock classes that began his long days, as they came for advice or to report progress. No matter where his office, or how impressive the appointments, those who knew him will remember the characteristic corner of it which he inhabited, the great robust figure surrounded by clouds of pipe-smoke and high jumbled piles of books and manuscript, press releases, and miscellaneous publications that encroached upon his work-space. They will remember the twinkle of the brown eyes, the gruff manner and the slow reassuring smile. They can still see the long, large, tapered fingers and how they would reach in the vest pocket for a match, strike it under the center desk drawer, and as it flared, bring it up to the insatiable pipe. Some said he smoked matches instead of tobacco. They will remember how the smoke from the puffing pipe would become thicker and how the match would be waved out and then flung in the general direction of the waste basket, to land, with most of its fellows, on the floor. They may remember some of his favorite expressions—"meaningful," "stout" which he insisted was better than "staunch," "awfully," and the sharp quick "yes!" when he agreed enthusiastically with a point made; and they may remember some of his favorite and most revealing compliments—"all wool and a yard wide," "a horse for work," and "clean as a hound's tooth."

Millis received his undergraduate degree at the University of Indiana in 1895, his M.A. in 1896, and took his doctorate at the University of Chicago in 1899. From 1902 to 1916 he taught at Arkansas, Stanford, and Kansas Universities and then in 1916 joined the faculty of the University of Chicago. In 1928, he became chairman of the economics department and held this position until he retired from the faculty in 1938. He was president of the American Economic Association in 1934-35, director of the National Bureau of Economic Research, and a founder and director of the Agricultural Economics Foundation.

During most of his academic career he was engaged in some kind of public service. He participated in the U. S. Immigration Commission's study on *Immigrants in Industry*, published in 1911, and directed a study of

health insurance for the State of Illinois in 1917. From 1919 to 1921 he was chairman of the Trade Board of the Chicago Men's Clothing Industry and from 1921 to 1923 and 1937 to 1940, chairman of the Board of Arbitration. Of this work Mr. Potofsky, president of the Amalgamated Clothing Workers once wrote, he "helped take the clothing industry out of the sweatshops and the industrial jungle." He was a member of the first National Labor Relations Board from 1934 to 1935 and was appointed by the President to several fact-finding boards on railway labor disputes. He was also appointed by Governor Horner of Illinois to be a member of the Illinois Commission on Unemployment. He made his influence felt in the writing and development of the National Labor Relations Act and the Social Security Act and in setting up the framework for the National War Labor Board.

In 1940, sources close to the White House urged him, in the President's name, to accept a position as umpire under the General Motors-UAW, CIO agreement. Since this was the first permanent umpire set-up in the newly organized mass production industries, it was extremely important that it be filled by the best man available. It was a position requiring scrupulous honesty, delicacy, tact, and the creative imagination to lay the groundwork for sound future relations. Millis held this position only a few months, but the groundwork was laid; today officials of the corporation and the union still speak of his wisdom and his fairness. He charted not only the future of relationships at General Motors but made arbitration respectable in mass production industries generally, and set the pattern for other companies and industries.

He had been umpire for only a few months when the President called him again, this time to become chairman of the National Labor Relations Board. More than once he said of this appointment, "I was dragged into that job by the President; I certainly was not a candidate for membership on the Board, much less the chairmanship." But his administration was marked by wisdom and fairness, as always, and when he resigned in June, 1945, because of failing health, it was from a Board whose reputation had grown through his service.

In the fall of 1945 he returned to the University of Chicago to become senior adviser to the newly formed Industrial Relations Center and to begin his analysis of the development of recent national labor policy. As co-author with one of his former students, Professor Emily Clark Brown of Vassar College, he had nearly completed a monumental volume, *From Wagner Act to Taft-Hartley: A Study of National Labor Policy and Labor Relations*[1] when he died on June 25, 1948, "with his boots on," as he had always hoped.

Although Millis is best known for his works in the field of labor, his major interest as a young man was public finance. As a contemporary of Seligman, Bullock, T. S. Adams, Hallander, and a few others who pioneered in the United States, he participated in the organization of the National Tax Association in 1907. While a young assistant professor from Leland Stanford University, he wrote a paper on "Business and Professional Taxes as Sources

[1] To be published by the University of Chicago Press in 1949.

of Local Revenue," arguing for more extensive use of such taxes as a supplement to levies on property, "so as to prevent these from becoming unduly burdensome." In the evolution of state income taxation, Simeon Leland points out, no one made a clearer diagnosis of the defects of the early laws and practices. It deserves, in Leland's opinion, a better place in the literature of state income taxes. It antedates both the work of Seligman and T. S. Adams in that field.

Even in these early years his work was practical and pioneering. At a time when scientific tax assessments were just being developed, Millis had his hand in making one, sleeves rolled up, doing, as usual, more than his share of the work. In Palo Alto, where he was then living, the general property tax was operating no more fairly than elsewhere and the tax roll was characterized by all sorts of assessment inequalities. Millis thought he could eliminate some of them. With the assistance of a local banker and building contractor, the three men rode over the city in a surrey estimating the land values and the cost of constructing the buildings in the town. The latter were reduced to the square foot or cubic basis which the contractor used in bidding for jobs. The result was a much better assessment than ever before—one substantially just as between neighbors. Rumor has it that this "revaluation" lasted for a considerable period.

Even after he transferred to "labor," Millis continued his interest in public finance. He was a keen critic of whatever he read and many students are in debt to him for suggestions from his early field.

Millis' writings are, of course, landmarks in the field of industrial relations. In a field where the rapid course of events makes writings unusually perishable, the three-volume series on the *Economics of Labor,* written in collaboration with Royal E. Montgomery of Cornell University, still constitutes the most authoritative and comprehensive analysis of modern labor economics for the period covered. The industry studies in *How Collective Bargaining Works,* which he planned and edited for the Twentieth Century Fund, set the pattern for a great many of the case studies now being developed in the field. His last work, on the policy implications of the Wagner and Taft-Hartley Acts, done in collaboration with Miss Brown, is in press. There is little question, however, but that it will have a profound effect on the development of future national labor policy.

His work—his scholarship and his wisdom—is undeniably preserved in his published writings, though admittedly much that is eloquent appears in his unpublished arbitrations. But it is preserved perhaps even more in the influence which his broad and humane philosophy exerted upon all who were privileged to work with him or under him, whether student, colleague, or official of management or labor.

People called him a man of sound common sense. But it was more than that. At the core of all he did was a deep pervading respect for his fellow man, a sense of responsibility, and a sense of justice. He believed he must do all he could to make individual achievement possible and to free individual capacity from the limits set by meager opportunity. He was generous, he sought to understand and he sought to help; but his rocklike sense of justice never

let personal interest, bias, or affection tilt the balance in favor of one individual or group over another.

He was a man of great humility and great modesty. He went out of his way to avoid credit, publicity, or public recognition and he recoiled from all that he felt was display—whether it was the wearing of his Phi Beta Kappa key or the periodic revision of the honors rendered him in *Who's Who*. Throughout his life he felt himself deeply indebted to his beloved, brilliant, and poetic wife whose intense sympathy and sensitivity supported his convictions and shone in his work.

He had a passion for truth, for the whole of it, and for common sense in its application to the solution of problems. As a scientist and a liberal, he was tolerant of much but never tolerant of dishonesty. He was a statesman and, as one of his colleagues once phrased it, a man "of wise judgment as to the mode by which and the rate of speed at which aspirations can be converted into attainable realities."

He was always willing to listen with sympathy and understanding to the problems of the numerous students under his direction as well as to those in other fields of economics who came to him as chairman of the department for a friendly word and a guiding hand. Yet he never sought to pry. "Millis," the saying was, "knows you have to eat," (and Millis frequently made eating possible). He was never too busy to give encouragement to any man or woman, whether student or young instructor. He was never so heavily loaded with work that he could not talk about the department, about research, about a personal problem, an idea, or a manuscript. He was never too busy to hear delightedly of the adventures of a young researcher getting his first taste of field interviews or of discovering exciting documents in union archives. When most harassed, he had time for a story or an anecdote that a student's encounter with Victor Olander or John Fitzpatrick had brought to mind. He felt all this, and the long hours that went with it, was his teacher's duty and he loved it all.

In later years many of his students wrote to him of how he had inspired them with new courage and ambition when the future looked bleak, how he alone had given them encouragement, and how he had been an oasis of friendliness, warmth, sympathy, and understanding.

He was forever willing to place other people's worries, other people's merits, the claims of other people's scholarship ahead of his own interest and his own health. This combination of sympathy and realism—this emphasis upon the use of concrete evidence in finding the solution that would make the "wheels go round," appears in all he did, in his instruction, his guidance of graduate students, his work in public law, even his recommendations on behalf of individuals.

In his teaching he expected his students to base their conclusions on concrete knowledge of how unions and business firms actually operated. Case studies of labor relations in particular industries and detailed studies of the character and effect of public policies assumed, therefore, singular importance. Union leaders and employers were brought to class to talk and to be

questioned; classes were taken to attend arbitration proceedings; and students were encouraged to attend union meetings. Students were expected to become familiar with the literature (and many of his students remember the voluminous bibliographies he provided), to carry on their own investigations, and to do extensive field work so as to broaden the base of factual knowledge and to enrich their understanding of it. He never seemed to enjoy abstract or theoretical reasoning. Indeed, wherever he dealt with abstract values and relationships, he painted his design with a broad brush. And yet he paid theory his respects in his teaching and put flesh upon its bare bones by illustrations from his rich experience.

His influence as a teacher, however, extended beyond those who specialized in his chosen field. At a time when labor unions were largely suspect, his thoroughness, his dispassionate honesty, his forthright and simple presentations of both sides opened his students' eyes and left many of them with a sense of social responsibility that enriched their later lives.

This same sympathy and realism he manifested as chairman of the economics department at the University of Chicago. At the time, some of the departments of that institution were run by their "heads" with an iron hand with little or no participation by other full professors. The opportunities for dictatorship and less than frank discussions of policies, personnel, and budget by colleagues of equal rank were numerous indeed. But under Millis, the men of full rank settled their common destinies, a factor which greatly added to the strength and prestige of the department. When men became professors, Millis handed them the budget and other documents pertaining to their collective affairs. There were no secrets, no feuds, and men dealt fairly with each other, aided by his impartial justice and sound judgment. He inspired leadership and confidence in his staff; they swore by him just as he stood up and fought for them.

His emphasis upon concrete fact and his judgment perhaps reached their maturest expression in his career as an arbitrator and as member of the first and chairman of the second NLRB. Millis was in his time perhaps the country's greatest arbitrator. He impressed both management and labor with his scrupulous fairness, his incorruptibility, and his ability to make a decision that would work. He made his decisions, he would say, like Bill Klem, the famous baseball umpire, "I calls 'em as I sees 'em." He believed that the arbitrator must direct his efforts to working himself out of a job. The greater the number of cases a permanent arbitrator was called upon to decide, the poorer, Millis felt, the arbitrator was. Millis believed that collective bargaining was designed to establish a rule of law in industrial relations and that an arbitrator or impartial chairman was useful, especially at the beginning, to help clarify the law and make plain the way it operated. And all his efforts were directed to having the men and women in industry settle their disputes themselves, once the law was plain, by following it, rather than by resort to arbitration or to government. Yet he never made his rulings or discussed his cases in terms of abstract rights or prerogatives either of management or of the union. He dealt always with the facts and specific issues in each

case and, at some stage of the proceedings, could usually be found in the plant, inspecting the machinery and talking with those who operated it. By analysing and developing the facts carefully and relating them to the provisions of the agreement or the law, he avoided futile debates about prerogatives and, as a result, was successful in developing, on the part of both sides an understanding of what they had to do if they wanted to get along together.

In later years, when he was arbitrator in the Chicago clothing market, he had an understanding that he did not have to decide a case if he thought the people could settle it for themselves. One of many such cases involved the discharge of a cutter in one of the clothing plants. Millis thought there were plenty of precedents by which this case could be settled and refused to take it. When representatives of the management and of the union came to see him, he told them that the manager of the company involved and the responsible official of the union both knew the agreement and the precedents and both knew what to do in a case of this kind. Accordingly, he sent the representatives back to tell the manager and the union official to settle the case according to their own knowledge. They did just that and the case never came back to him for decision.

The cooperative labor relations which he stimulated wherever he arbitrated had their roots in two fundamental principles. Millis believed that unions must have sufficient power to meet their responsibilities under collective agreements. In his arbitration cases, therefore, he worked to strengthen unions in this respect and made plain to employers that such was his intention. He believed also that employers must have sufficient flexibility to handle their affairs and enough power to get their work done efficiently without undue interference from the union or from the workers. He was a stickler for the management's being able to get its work done efficiently and being able to get the quantity and quality of work to which it was entitled.

In recent years he was disturbed by the trend towards high arbitration fees. He always remembered that half of the arbitrator's fee or salary came from working people, whose earnings were meager. When he agreed to become the umpire for the UAW, CIO and the General Motors Corporation under the terms of their collective agreement, he was offered, and refused, a large salary. He explained that he wanted only enough to live on, which was about what he had been earning at the University.

His service at the NLRB from 1940 on was perhaps his most trying and demanding, and yet it seems very likely that it was the crowning achievement of his career. It was his opportunity to administer an act which to him was the "foundation for much that is helpful in our civilization as it develops." He felt intensely that the act housed "values to our nation in economic, social and communal terms"—not only in better wages, hours and working conditions, but reduced turnover, increased stability, job security, and above and beyond all this, "industrial democracy or real representative government."

On his retirement from the Board in 1945 he intended to develop more fully and document these views on the significance of the Wagner Act. The

passage of the Taft-Hartley Act the next year intensified and broadened his purpose. In his last research with Miss Brown, he sought, therefore, to bring all his rich experience to bear on an analysis and creative criticism of our national labor policy.

Here again, in this last work, and perhaps more explicitly than ever, appear those concepts and that philosophy which had colored all his work though the years. Here he stated his belief in the importance of "responsible self-government in industry" as the "main, continuous, and needed support of responsible, intelligent, representative government in the body politic."

Here he emphasized again that the plant, rather than the court, was the place where most problems could best be solved, for "industrial relations have to do with problems involved in living and working together." He looked upon the solution of labor disputes much as one would look upon the solution of marital ones. Just as the divorce court appears only in extreme instances in the solution of marital difficulties, so too, Millis writes, should litigation appear only rarely in the solution of industrial disputes. "Losses in court fights in the field of industrial relations," he wrote, "may not, indeed frequently do not, end with the close of the suit."

Believing deeply as he did in the fundamental honesty and fairness of human beings, he sought for conditions which would promote these values. His experience in arbitration and at the NLRB had yielded ample instances of deficient responsibility among union officials and members and among employers. "On the other hand," he wrote, "most experienced men have a sense of fairness when they come to know the facts. The problem is how to make a sense of fairness and responsibility more general. What will assist in effectuating, and what will militate against, this end?"

And in spite of his discouragement over some of the recent trends in governmental labor policy, his last work reflects his continuing confidence that something could be done about difficult problems "without the effort necessarily begetting problems which outweigh the good effected." He spoke of his conviction "that cooperative thought and action on problems by those most directly concerned with them can accomplish much." Concretely, he thought that some of the difficult and controversial issues dealt with in the Taft-Hartley Act could have been, and should still be, worked out in conference under government auspices by the representatives of employers and labor and the public. Then government could play its proper role of providing the conditions under which the parties in industry could and would, in all but very exceptional cases, solve their own problems by democratic means, with due regard for the public interest.

He would doubtless have been encouraged by the startling redirection of national labor policy which occurred after his death. It is unfortunate, to say the least, that the country could not have benefited by his wisdom in that policy's formulation. Yet surely much that is good in it bears the imprint of his philosophy. And surely not a little of the hope for healthy relations in industry, for honest and creative bargaining, for wisdom and justice in administration, and for honest and creative scholarship, has its basis in his

influence. For the Millis wisdom has taken deep root in industry, in scholarship, and in the minds of those who draft our national policy. And its wholesome and humane effect will persist in men and women—in those who knew him and those who were affected by him—over the years.

EMILY CLARK BROWN
PAUL H. DOUGLAS
FREDERICK H. HARBISON
LOUIS LAZAROFF
WILLIAM M. LEISERSON
SIMEON LELAND

BOOK REVIEWS

Economic Theory; General Economics

Économie et Intérêt: Exposition Nouvelle des Problèmes Fondamentaux Relatifs au Rôle Économique du Taux de l'Intérêt et de Leurs Solutions. By M. ALLAIS. (Paris: Imprimerie Nationale. 1946. Pp. 800.)

The author of *Économie et Intérêt,* M. Allais, is professor of general economics at the National School of Mines in Paris, and of economic theory at the Statistical Institute of the University of Paris. He is also chief engineer of the Corps des Mines.

His book is at once a piece of research, a textbook and a tract on social and economic policy. One of its distinctive features is its abstract and mathematical character. Although basic calculus is sufficient for the argument in most of the main text, a somewhat more elaborate but standard equipment is required for the argument in the technical appendices, which comprise 140 pages.

The outstanding weakness of this work arises from the fact that the author is not well acquainted with the Anglo-Saxon and Scandinavian literature. Notwithstanding the fact that much of his thinking is based on the writings of Irving Fisher, the only other modern Anglo-Saxon economists with whose work he is acquainted are J. M. Keynes and J. E. Meade. (There is also a reference to one article by J. R. Hicks.) There is no reference to Knut Wicksell's work, despite the fact that the author's cycle theory is almost identical to that of Wicksell. The implications of this limitation are obvious. The author has missed the basic modern contributions to the theory of interest, with the exception of the work of Keynes. Only too often he arrives independently at conclusions which for a long time have been part of the stock-in-trade in English-speaking or Scandinavian countries.

Following a long introduction which deals with basic concepts, definitions, and the mathematics of compounding and discounting, the author presents what amounts to a theory of interest rate determination in a real, stationary economy. In this basic economic model, money exists only as a unit of account, not as a medium of exchange. Credit transactions and even banks are present, but there is no circulating money. This construction enables him to introduce money into the picture, but to eliminate its "disturbing" effects. In such an economy investment and savings are functions of the rate of interest, and determine between them its equilibrium level. The conclusion is obvious, but the analysis leading to it is elegant and interesting.

Having completed the study of interest rate determination in a real, stationary economy, the author plunges into welfare economics. His two chapters on "Interest and Social Return" and "Interest and Social Productivity" constitute the foundation for his policy recommendations. It is unfortunate that here again the author does not seem to be acquainted with important contributions. Pareto and J. E. Meade seem to be his only sources. There is no

mention of Barone, Pigou, Hotelling, or A. Bergson. This omission turns out to be particularly serious, since his fundamental conclusion, that social product is a maximum when the rate of interest is zero, is ill-founded. Following Pareto's concepts he argues that social revenue is maximized under perfectly competitive conditions. This optimum position is not unique. The optimum points constitute a manifold infinity of values, corresponding to alternative distributions of income among individuals. He proceeds, then, to extend the proposition to the case of a dynamic but stationary economy. He argues that the time-shape of consumer expenditures is arbitrary from a welfare point of view. Individuals maximize their welfare with reference to a single point of time. Notwithstanding the fact that they take into account future satisfactions, they evaluate them with reference to the present. It can be seen, therefore, that in the general case (which includes both static and dynamic stationary states) the optimum points constitute a manifold infinity of values, corresponding to alternative distributions of income among individuals and to alternative time-shapes of consumption. For any given distribution of income and time-shape of consumption, perfect competition is optimal. His modification of Pareto's argument is merely an expression of his view that, although individuals are capable of making correct decisions in allocating their expenditures among competing goods and services in the present, they are incapable of making correct decisions with respect to saving. This conclusion is essential to the author, since it paves the way for his policy proposal that capital formation be determined by responsible government action rather than by free choice.

Next the author takes up the problem of optimum capital formation. Among all the stationary economies which satisfy the conditions of maximum social product, but the capital equipment of which is variable, there exists only one which satisfies the conditions of optimum capitalistic structure. Social product may be said to be a maximum only in this case of optimum capitalistic structure. This *maximum maximorum* obtains only when the rate of interest (in the production sector) is equal to zero. The author's proof of this proposition is not satisfactory. By treating units of factor services of the same kind, but performed at different periods of time, as homogeneous and interchangeable, he arrives at the conclusion that the presence of a positive or negative rate of discount prevents optimum allocation (which calls for equality of marginal products in different uses). A correct, generalized statement of the conditions of maximum product would have led to the conclusion that no single rate of interest is implied.[1] This position of the author is particularly unfortunate, since a great part of his policy platform is based on the assumption of the desirability of a zero rate of interest in the production sector.

The analytical climax and anticlimax of the book is reached in Chapter VIII where the author introduces circulating money into the picture. The performance of the author in this chapter is impressive, although uneven.

[1] See Paul Samuelson, *Foundations of Economic Analysis* (Cambridge, Harvard University Press, 1947), p. 233, note.

The demand for cash-balances is very aptly introduced into a model of economic unit behavior. The analysis runs essentially in terms of liquidity preference along Keynesian lines.[2] The author arrives at an integration of the savings-investment with the liquidity-preference theories of interest along lines which are generally parallel to the loanable fund theory. His construction, however, is entirely independent of the contribution of the Swedish school or that of D. H. Robertson, with which he does not seem to be acquainted.

The transition from the "unit of account" economy to a true monetary economy is not made abruptly but by successive approximations. The equilibrium and stability conditions of a monetary economy, in which demand for speculative cash-balances and money creation by the banking system are absent, are formulated first. For this type of economy, and as a first approximation, the rate of interest may be thought of as being determined by the propensities to invest and save, the price level being determined by the volume of cash-balances desired at this rate of interest. Monetary equilibrium is essentially defined in terms of the equality between the "pure" money rate and the "pure" claims' rate of interest. This equilibrium is stable. Any deviation from it generates forces that equalize the two rates.

Finally, the author turns to the case of a monetary economy in which both demand for speculative cash-balances and money creation by the banking system are present. This is the acid test of the book. The reader has gone through 360 pages concerning all types of simplified economies, and at long last he is ready to follow the author through the labyrinths of a full-bodied, down-to-earth economy. Unfortunately the author fails to lead through these labyrinths; he merely by-passes them. This is the anticlimax of the whole performance. The author argues that equilibrium conditions are roughly identical to those of the 100 per cent money, no-speculative-cash-balances economy. But equilibrium here is unstable. Any difference between the money and claims' pure rates of interest starts a cumulative process away from equilibrium, which comes to an end, in either direction, for reasons similar to those advanced by Wicksell in his *Geldzins und Güterpreize.* The analysis of the dynamics of disequilibrium is highly unsatisfactory. The author suddenly becomes a "literary" economist and is satisfied with vague generalities about a process which his technique is incapable of depicting. His micro-economics does not furnish him with tools adequate to deal with issues which even a simplified macro-static or macro-dynamic model could easily handle.

The upshot of the author's analysis is that money creation by the banking system and speculative cash-balances (thesaurization) are the determining *causes* of the instability and the cyclical behavior of our economic system. The implications for economic policy are obvious. Hundred per cent money and elimination of speculative cash-balances will stabilize our economy and eliminate cyclical fluctuations.

The final part of the manuscript deals with policy. The major objectives

[2] It must be stated emphatically, however, that liquidity preference is the only tool taken over from Keynes' *General Theory.*

are maximum social revenue and product and price stability. These objectives can be accomplished, the author argues, by *competitive planning*. Such planning would deal with structure rather than behavior, behavior being coordinated through the price system in a perfectly competitive economy. This structural planning involves at least the following measures: (a) a curb on monopolies; (b) a zero rate of interest in the production sector; (c) 100 per cent money; (d) elimination of the demand for speculative cash-balances.

Concerning the first item, the "competization" of the economy, the author is very vague. In fact he does not deal with it. Here again he seems to be unacquainted with the contributions of Oscar Lange and Abba Lerner. Concerning the zero rate of interest in the production sector, as well as the elimination of the demand for speculative cash-balances, he has some definite proposals to make. The rate of interest cannot become zero unless land is collectivized, since land-values become infinitely great as the rate of interest approaches zero. But this is not all, because, in so far as the unit of account is also circulating money, the demand for cash-balances becomes very great if not infinitely great as the rate of interest approaches zero. Not only must we collectivize land, then, but we must also curb the demand for idle cash-balances. This can be accomplished by a continuous devaluation of the value of circulating money in terms of a stable unit of account. A separation of the two functions of money is a prerequisite for the simultaneous achievement of price stability, a zero rate of interest, and the elimination of speculative cash-balances. It still is possible, of course, that spontaneous saving may not be sufficient to bring the rate of interest down to zero. The government can correct this by appropriate action, which may take the form of incentives or taxation.

This air-tight, no-interest, no-profit, 100 per cent-money, perfectly competitive economy constitutes the author's policy goal. One cannot help having an uneasy feeling that the author is developing a policy for a never-never land that has few if any similarities to the world around us. The author shows very little understanding of the forces and the mechanism of economic development. He makes a fetish of stability, and has taken extreme pains to build a strait jacket for an economy that does not fit his views.

The author's contribution to the theory of interest would be significant were it not for the fact that most of his results have been available in acceptable form for some time now. It is a pity that M. Allais has worked so hard to arrive independently at some conclusions already well established. In fairness to him, it must be recognized that he has attempted a task of great magnitude, and that he has handled it with unusual skill.

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Economic Analysis. By KENNETH E. BOULDING. Rev. ed. (New York: Harper. 1948. Pp. xxvi, 884. $5.00.)

In reviewing the second edition of a book as well known as Professor Boulding's *Economic Analysis*, the reviewer must confine himself to discussing what is new in the new edition. There are few straightforward additions of

new material, however, and the main change is one of approach. In the new edition, the chapters on money, banking, and international economics of the first edition have been partly changed and partly expanded into an integrated discussion of macroeconomics. This change has necessitated a very welcome reorganization of the book, which now consists of four parts. Part 1, on Supply and Demand, consists of the first twelve chapters of the old edition with only minor changes; Part 2 contains the new approach to Macroeconomics; Part 3 on Marginal Analysis incorporates the more elementary chapters of the similarly entitled 2nd part of the first edition; while the more difficult chapters have been taken out and assembled, together with some additional material, in Part 4, called More Advanced Analysis.

Professor Boulding's handling of macroeconomics is up to his usual high standards. He begins by pointing out the limitations of partial equilibrium analysis and the need for an aggregate approach, showing that "many propositions which are true of individuals or of small groups turn out to be untrue when we are considering the system as a whole" (p. 260). He gives an excellent discussion of aggregate concepts (Chaps. 13 and 14); he shows the fundamental identity between aggregate receipts and expenditures (Chap. 15); he introduces sequence analysis to prove the possibility of underemployment equilibrium (Chap. 15); and he discusses problems of national economic policy (Chap. 19).

All this is admirably lucid and very well done; but it provides only the skeleton of macroeconomics, while other parts of the book contain quite a lot of meat. This asymmetry would not be disturbing if the main purpose of the book were to provide the tools of partial equilibrium analysis and the discussion of macroeconomics were aimed merely at showing the connection between partial and aggregate analysis. But the author quite obviously aims at a complete coverage of all fields of economics; and by the standard of his aims there is a lack of balance between his detailed partial equilibrium analysis and his "sketch of macroeconomic principles."

To some extent this is unavoidable and explained by the relatively recent emergence of macroeconomics as a subject. (The author himself, who is aware of this lack of balance, explains it in this way.) But to a large extent it is also due to Professor Boulding's insistence on discussing macroeconomics on the same high level of abstraction and general validity on which he discusses the theory of consumer's choice and the firm's production function. This lends formal elegance and neatness to the discussion; but it causes both author and reader to overlook the main advantage of aggregate analysis: our ability to say more about the behavior of a large group than about that of an individual. It is the very essence of macroeconomics that, because group behavior is more regular than the behavior of any single member of the group, we can establish statistical laws and make specific statements about a nation's reaction to a change in incomes, or prices, or liquid asset holdings, while we can make only very general statements about the individual's reaction to the same changes.

This is not brought out at all by Professor Boulding. His discussion of the multiplier concept and the consumption function is implicit and hidden in

footnotes and examples. He mentions the parallel movement of consumers' expenditure and business investment in the interwar period as the basis of the "Keynesian view"; but he does not discuss it and warns that "conclusions must not be drawn too hastily as to the nature of the causal relationships involved" (p. 404). There can be no doubt that we are very far from a complete understanding of these statistical relations and that hasty conclusions have been drawn; nevertheless, a fuller discussion of these concepts and relations, with due warning of our rudimentary knowledge of them, would have been preferable to the author's refusal to discuss any statistical law.

Most of the other changes in the book are contained in Part 4. There is a new chapter on indifference curve analysis (Chap. 34), which applies this technique to problems of taxation and the measurement of the gain from trade. The latter is expressed in terms of the buyer's and seller's surplus; and while the discussion is clear, it is not simple and makes one wonder why the author did not use the much simpler approach of superimposed indifference maps. Another important addition is a new discussion of investment in the individual firm, contained in Chapter 36. This chapter now constitutes by far the best introduction to modern capital theory known to this reviewer. It contains the essence of the controversy between the Austrians on the one hand and Wicksell, Knight and Kaldor on the other; and it should be read by every student of capital theory. The book also contains a new section on the theory of profits (in Chapter 37) and a very good new appendix on the literature of economics.

In general, the new edition is an improvement over the old; and the book remains, in the reviewer's opinion, the best text on partial equilibrium analysis at the intermediate level. Its coverage in this field is amazingly complete. It contains the best discussion of the theory of production in the English language, the only detailed discussion of the behavior of the individual worker, and the clearest statement of the fundamentals of capital theory. Owing to the omissions discussed above, the new edition is not a "Principles"; but the days of the "Principles" are probably past beyond recall. I doubt very much if today it is either feasible or desirable to deal with the whole body of economics in one volume on any but the beginner's level.

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Grundlagen der Theoretischen Volkswirtschaftslehre. By HEINRICH VON STACKELBERG. (Bern: A. Francke. 1948. Pp. xvi, 368. 19.50 sw. fr.; cloth, 23.50 sw. fr.)

This is the last work of the well-known German theorist. His untimely death, at the age of 41, occurred in October of 1946 while he was visiting professor of the University of Madrid. The book, completed by the author, appeared first in Spain shortly before his death. The German manuscript was published last year in Switzerland under the editorship of Professor Valentin F. Wagner who contributed a preface to the book.

The present "Foundation of Economic Theory" is a revised and greatly enlarged edition of the former "Outline of Economic Theory." This earlier

book appeared in Germany in 1943. It practically remained unknown because almost the whole edition was destroyed in an Allied air raid. Both books are limited to the theory of micro-economics. There is no trace of the influence of Keynes. Generous tribute is paid to the works of Eucken, Hicks and Allen, Amoroso, Chamberlin, and Triffin. Other contemporary American writers are not mentioned.

The book is carefully organized; its presentation is exceptionally clear. All important theorems are presented in their algebraic and geometric forms, usually accompanied by further explanations in small print. The literary style is appealing; sentences are relatively short. Candidates for degrees will find it worth their while to select this book as a text for their language requirement. They will not only learn the German economic vocabulary but also review modern theory for their departmental examination. For the book is written as a text for students, a bit above the level of seniors. In its logical consistency and in its mastery of the principles, the book compares favorably with the respective texts in this country, as a review of its leading ideas will indicate.

The new book is divided into six parts. Part One (pp. 1-28) describes specialization, the circular flow, Fisher's equation of exchange, and a stable price level as the framework of the static economy. Part Two (pp. 29-104) deals with the theory of production, as well as the problem of time in production. Part Three (pp. 105-60) gives the theory of the household, considering income, demand, and savings of the household as well as its reactions to changes in prices and incomes. The theory of prices constitutes Part Four (pp. 161-256). Discussion of prices under perfect competition, monopoly and oligopoly is supplemented by governmental price regulation, and auxiliary price factors, like inertia and cartels. Part Five (pp. 257-332) comprises the theory of distribution. Rents, wages and profits receive relatively less space than the theory of capital and interest. An evaluation of the role of perfect competition as the organizing principle of the modern economy concludes the book.

Contrary to tradition, the author begins his book with the theory of production of the firm. Central to his theme is the principle of diminishing returns. It is presented in its modern form of total, average, and marginal returns as well as the rate of substitution and complementarity. The principle of marginal productivity is even applied to money. Expressing the value of the marginal products, in terms of a stable money unit, the author speaks of the principle of the "weighted marginal productivity" and presents the "principle for the equalizing of the marginal returns of money." When applied to the firm, the principle of weighted marginal productivity determines the demand, the principle of marginal cost determines the supply for the factors of production. In an equilibrium situation, the price of factors of production is then equal to the values of these marginal quantities. In discussing cost, the author translates returns into cost concepts. Increasing returns indicate declining cost. The principle of diminishing returns is thus the obverse of the law of increasing marginal cost. Cost and return concept are thus correlated and both together explain the behavior of the firm in a static economy.

The revised edition brings a new chapter on the element of time in pro-

duction. Böhm-Bawerk's theory of increased productivity through the choice of more roundabout methods of production is translated into a marginal principle. Stackelberg maintains that the element of time is governed by marginal productivity, if this principle has been properly refined. Hence, the author develops his principle of diminishing marginal productivity over time. This was published in an article in 1941 and the book contains only an abbreviated version of the principle. A producer, the author assumes, has a distinct plan for each act of investment. He compensates factors according to their discounted marginal values. The producer's most favorable period of production is obtained when the percentage increase in the marginal productivity of the respective factor is proportional to the equilibrium rate of interest. The rate of interest is thus not only a measuring rod of the respective periods of production but also of the marginal productivities of factors over time.

The author examines the merits of the marginal utility and indifference theories in his discussion of the household. For him, the indifference theory has to replace the first law of Gossen because utilities are subjective; it is neither possible nor necessary to measure them. However, the second law of Gossen is accepted as a tested fact and translated into the "balance equation" of the household in which all the marginal utilities are of equal value. (In comparing the marginal rate of substitution with marginal productivity, Stackelberg suggests two new technical terms. The curves of equal returns from factors, called *isoquants* by Frisch, are given the Greek name *isophores;* the corresponding curves for products are dubbed *isotimes*). Under the heading of saving of the household, the element of time is analysed similarly to the one in production. In arranging his streams of income so as to obtain equal satisfaction in each income period, the consumer acts according to the marginal rate of substitution over time. In dividing his income between savings and consumption, the consumer is guided by the rule of the "balance equation over time." The concluding chapters in this section on income and substitution effects, following Hicks and Frisch, are noticeable for the author's attempt to incorporate the law of Engel and the Giffen paradox into the theory of income effects.

Perfect competition, single monopoly, single monopsony, and bilateral monopoly comprise the first part of the theory of prices. The cobweb theorem is presented as an extension of the competitive price, resulting from delayed reaction and long-run adjustment of producers to changes in prices. In presenting single monopoly and monopsony, the author follows mainly Amoroso. "Cournot's point" indicates equality of marginal revenue and marginal cost for the monopolist. The "purchasing curve" of the monopsonist is derived from the marginal outlay curve of sellers. (Stackelberg argues against using the term monoposony because its Greek meaning is "demand for meat"). The "curve of exploitation" is limited to the case of a price which covers little more than the variable cost of the seller. The theory of bilateral monopoly is merely a repetition of the two previous cases, in which first the monopolist and then the monopsonist is said to dominate the situation. The respective gains are called producer's or consumer's rent.

Duopoly is regarded as the simplest form of oligopoly. Four kinds of

duopoly are distinguished. When both producers are dependent upon each other, we have "Cournot's duopoly." When both producers act independently of each other, the result is "Bowley's duopoly." The two other possible reactions are called "asymmetrical duopolies." All four forms find a detailed and admirable geometric presentation. There is, however, no explicit discussion of pure oligopoly; the whole discussion of monopolistic competition—including even price discrimination and polypolistic competition—does not exceed six pages in all. Two reasons seem to explain this scanty treatment of monopolistic competition. All imperfect market forms, excluding pure monopoly and monopsony, are said to lead to an indeterminate pricing situation. This problem the author had already analyzed in his chapter on duopoly; monopolistic competition did not seem to have theoretical significance in itself. There is also a practical reason for this attitude. Product differentiation and price discrimination are either less common in Europe or are closely associated with cartels. These were regarded as a subtype of monopoly and presented in the chapter on that subject.

The economic influence of the state induced Stackelberg to two modifications of static theory. First, economic policy was considered a privilege of the government instead of being the sum total of all economic actions, whether by private or public agencies. Second, governmental price regulation is considered a part of pure theory. Consequently, he devotes a chapter to this problem. Although different in their aims, governmentally regulated prices fall under the theory of monopoly because they are set like monopoly prices. Governmental prices can be of four different types. They can either be maximum or minimum prices as well as unchanging (*Festpreis*) or target prices. Any one of these prices can be equal to the competitive price. If the former is below or above the latter, the government will have to regulate demand and/or supply—like a monopolist. The government, too, has to obtain an equilibrium in the market, either by changing the market factors or the structure of the market itself. Government prices must thus not necessarily fail but can be just as permanent and successful as cartel prices.

The theory of marginal productivity furnishes the guiding principle for the explanation of functional distribution. Most theorems developed in the theory of production are carefully applied in the chapters on rent and wages. Yet there is no theory of an independent supply of land and labor. Labor unions are not mentioned; pure competition is assumed in all distribution chapters. The extensive chapter on interest presents a modernized version of Böhm-Bawerk's propositions. Money value is kept constant consistently; the liquidity preference of holders is not mentioned. Profit is interpreted as a differential rent which is not an element of cost. Ricardo's differential rent theory is thus applied to the special gains of entrepreneurs.

The concluding part evaluates briefly the relevance of pure theory. Presented are three propositions. Perfect competition is superior to all other economic systems; the government may organize a quasi-competitive system which may be equally effective; the Soviet economy is the system of a "total profit-seeking monopoly." These attempts to interpret existing economies in terms of pure theory reveal the usual and inevitable helplessness of the micro-

economist. All kinds of comparison have been made in the past. Perfect competition has been identified with liberalism and with socialism, and it was present as an economic ideal to fascist dictators.[1] Moreover, microeconomists have called for an additional theory—such as dynamics, welfare economics, uncertainty, money and business cycles (Stackelberg's position), or macroeconomics. They all were at some time presented as the necessary link between pure theory and economic policy. Recent attempts to coordinate microeconomics and macroeconomics are hardly promising. They have revealed the fact that a comprehensive theory of macroeconomics calls for a new theory of the firm, the household, and especially of distribution. It thus seems fair to say that Stackelberg's lifework culminated in the most comprehensive German presentation of microeconomic theory. It appeared at a time when many American economists have ceased to believe in the practical relevance of microeconomics.

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[1] For the theory on the governmentally directed competitive economy (*gebundener Wettbewerb*) see Günter Schmölders (ed), *Der Wettbewerb als Mittel volkswirtschaftlicher Leistungssteigerung und Leistungsauslese* (Berlin, 1942).

Grundzuege der Theoretischen Nationaloekonomie. By ALFRED AMONN. (Bern: A. Francke. 1948. Pp. 200. 11.00 sw. fr.)

This concise outline of economic theory by the senior professor of Berne University, Switzerland, presents the main principles of modern value and price theory. In his previous books, the author distinguished between pure economic theory and "the more practically oriented" theory of welfare economics. The former deals with the principles of the individualistically organized exchange economy; the latter considers the aims and means of economic welfare and is thus the necessary link between pure theory and economic policy.

The slender volume is limited to pure theory, in which case the author is more indebted to Pareto (price interdependence) than to Hicks and other contemporary writers. The book considers five problems. It begins with the general theory of prices; deals in detail with prices under conditions of joint as well as composite demand and supply; presents the theory of distribution; discusses the relationship between money and prices (quantity theory); gives finally the theory of international values and rates of exchange. The intention is to write an introduction into theory for beginners. Yet the exceptionally long sentences, and often involved sentence structure, will complicate the reading of this book by candidates for degrees in this country.

The author rejects the marginal productivity theory and claims to have come across a new theory of distribution. He emphasizes the interaction of productive factors in the process of production. This induces him to speak of capital products or labor products, according to which factor was primarily responsible for the creation of a series of goods. In an equilibrium situation there must not only be full correspondence between the prices of the productive factors and their respective products but also, it seems, between the

various quantities of productive factors and their respective products. The "new theory" is called the necessary price differentiation between productive factors and products (*Produktpreisdifferenziertheit*).

According to the author, this new theory differs in two respects from the traditional theory of marginal productivity. Although the supply price of productive factors is normally determined by their respective marginal costs, it would be incorrect to say that the value of the various factors was "determined" by their respective marginal productivities. The value of the marginal product is just one of the variables that influences output and substitution decisions. Equally important is the extent of production as well as the price ratios between factors and final products. The marginal productivity theory is thus said to engage in circular reasoning and can thus not explain satisfactorily the functional distribution of income. Moreover, the demand price for a productive factor is based upon a joint demand for various factors used simultaneously. This problem of substitutability of factors, the author implies, cannot be handled adequately by the traditional theory.

Careful reading of the chapters on rent, interest, and wages reveals essentially the "real approach" of the traditional marginal productivity theory. Emphasis upon the necessary correspondence between factor and product prices, upon the variable proportions of factors, or upon total demand and supply, does not induce the author to employ either the "isoquant" or the "aggregate" or any other mode of analysis. Instead, the prices of the various factors are discussed without stating strictly the usual limiting assumptions. This enables the author to consider such problems as negative rent, irregular shape of the supply curve of labor, or the missing inverse relationship between supply of capital and interest. The impact of these and other problems upon the tendency towards a general equilibrium is not studied. Deviations from the equilibrium position merely lead to frictional profits which are transitional in nature. In consequence, the new theory brings essentially the traditional theory of marginal productivity stated in a somewhat less familiar form.

An appendix of eighteen pages evaluating critically the last book of Stackelberg merits the attention of theoretical economists.

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Economic History; National Economies

Austria from Habsburg to Hitler. By CHARLES A. GULICK. (Berkeley and Los Angeles: University of California Press. 1948. Two vols. Pp. xxiii, 1906. $20.00.)

Professor Gulick's study is essentially an account of the policies and achievements of Austrian Social Democracy between the two world wars, and a detailed history of the events that led to the movement's violent suppression. This story has been told elsewhere, but what distinguishes *Austria from Habsburg to Hitler* is its encyclopedic character. Professor Gulick, who

spent thirteen years at his task, has combed the relevant literature with microscopic care, and adduced an incredible amount of data in support of his conclusions, which are stated vigorously throughout. The author makes no concessions to those whom he considers responsible for the suspension and termination of democratic government in Austria, and some notion of the book's flavor may be gleaned from his prefatory remark that "I have no patience with the intellectual contortionist who apparently thinks he is 'unscientific' unless he tries to get a part of each foot on each side of every question that is faintly controversial." Professor Gulick has followed his own precepts by planting both feet firmly on the side of social democracy.

The theme of the story is the struggle waged within the rump republic of Austria, a state of doubtful economic viability and with the added handicap of a political and cultural schism between the industrial workers and the peasants, between a socialist party that professed Marxism but practiced democracy, and a clerical party that professed democracy but betrayed it in the end. The author tends to personify the conflict, and presents it in terms of the policies advocated by the leading protagonists: Otto Bauer, the brilliant scholar who attained undisputed leadership of the Social Democratic Party, and Monsignor Ignaz Seipel, the Christian Social chancellor of Austria whom Professor Gulick regards as the evil genius of the republic, a master political strategist but a "profoundly undemocratic man." The climax came in 1927, when spontaneous riots and their suppression by the government revealed weaknesses in the socialist position that had not been appreciated either by the socialists themselves or by their opponents. Thereafter, the incursions of fascism became bolder, while the socialists were increasingly on the defensive, the process ending in the tragic events of February, 1934 and the forcible dissolution of the Social Democratic Party.

The author maintains that fascism was brought to Austria not by the Germans but "by a combination of indigenous Fascists with Roman Catholic political leaders who either betrayed their one-time political principles, or who never had any to betray." These are strong charges indeed, and adherents of the old Christian Social Party are likely to take exception to them. It may be that Professor Gulick has occasionally gone too far in his criticism, and that he does not stress sufficiently the fact that the Christian Social Party included within its ranks, and among its leadership, many good democrats. Nevertheless, the evidence he adduces against the principal leaders of the Catholic party, Seipel, Dollfuss and Schuschnigg, drawn mainly from their own public utterances and writings, is very damaging, and it is difficult to escape the conclusion that all three were totalitarian in thought and in deed.

While *Austria from Habsburg to Hitler* is forbidding in bulk at first sight, the second volume, devoted almost entirely to a detailed account of the development and triumph of Austrian fascism, is of interest primarily to the specialist in central European history, and may be skipped over rapidly by the economist. An exception is Chapter XXVII, in which Professor Gulick contrasts the doctrines and the practices of Austro-Marxism, and comes to the conclusion that while the Austrian socialists thought of themselves, and

were generally regarded, as being to the left of the mainstream of European social democracy, they acted as reformists. A gradual, almost imperceptible trend to the right resulted from the day-to-day realities involved in administering the municipality of Vienna and participating in parliamentary life.[1]

Professor Gulick might have made clearer a matter of which he indicated his awareness,[2] the fact that while the Marxist ideology provided the labor movement with a unifying force, it was by no means an unmitigated blessing. The legacy of decades of Marxian indoctrination still remains to plague continental socialism in its struggle for survival against communism.

It is the material in Volume I, however, upon which the interest of the economist will center. After what amounts to a good-sized tome on the origins of Austrian socialism, and on the turbulent events accompanying the formation of the Austrian republic, during which the socialists fought a tactically brilliant campaign to limit excessive political radicalism among the workers, Professor Gulick turns to the impressive practical achievements of the socialists in their stronghold of Vienna.

Several of the ensuing chapters are actually monographs that can be read with profit divorced from the remainder of the book. Chapter X comprises an 80-page history of Austrian social legislation, providing a useful summary of this experience. Chapter XII deals with the cooperative movement, which was important to the socialists politically as well as economically. Socialist reform of the Viennese tax system, resulting in a substantial shift of the burden of taxation from the workers to propertied groups, is discussed in Chapter XIII, where Professor Gulick considers and refutes the charges that the new system stifled private building construction, created unemployment in the luxury trades, and prevented private capital formation.

Policies in the field of taxation rendered feasible the famous public housing projects of Vienna, an elaborate system of social welfare, and ambitious educational and cultural programs. The chapters covering some of these subjects suffer from prolixity; for example, much of the material on the socialist youth organizations, on education, and on cultural work could have been compressed greatly without impairing the value of the book. One feels that Professor Gulick's admiration for the impressive apparatus of the socialist party occasionally led him to overstate the novelty and significance of its achievements.

Despite the fact that the essential core of his study is the labor movement, Professor Gulick devotes only a single chapter to the history and practices of the trade unions. The reader will search in vain for adequate discussions of collective bargaining procedures, collective agreements, working rules, and other union policies which are everywhere the vital concern of the trade unionist.

[1] It may be of interest to note that I have reached the same conclusion regarding the Norwegian Labor Party, which was usually paired with Austrian social democracy in the European political spectrum.

[2] *E.g.*, p. 439: "The orthodox Marxian or Englesian attitude formed a handicap which had to be overcome before the party could put its full weight into the constructive housing schemes of the city council of Vienna."

The neglect of this phase of Austrian labor history may possibly be ascribed to the author's oft-repeated view that Austrian trade unionism "was predominantly political throughout its history." He devotes a portion of his trade union chapter to a critique of Perlman's view that "manual groups . . . have had their economic attitudes basically determined by a consciousness of scarcity of opportunity," whereas middle-class intellectuals are absorbed in philosophical abstractions, leading to "a mutual divergence in labor ideology between the 'mentality' of the trade unions and the 'mentality' of the intellectuals." On the contrary, asserts Gulick, there was no real difference in outlook between the two branches of the Austrian labor movement. The trade unions, far from evincing any desire to limit themselves to the narrow economic horizons envisioned by Perlman, "came to regard parliamentary activities as the fulcrum of labor policy," and "were increasingly regarded as the economic arm of an essentially political movement."

There was much in the peculiar circumstances of Austria that justifies Professor Gulick's approach. For example, while in 1920 the Social Democratic Party had 335,000 members against 900,000 for the "free" non-Catholic trade unions, by 1930 party membership had reached 698,000, while trade union membership fell to 655,000. Thus party membership actually came to exceed trade union membership, a situation that is probably unique in the annals of western socialism. It may be that the precarious economy of Austria precluded substantial economic gains through the traditional methods of trade unionism, and that the Viennese workers came to regard "the municipal apartments, the health and recreational services, and the reformed schools of the Socialist administration" as the chief source of increased real income.

Nevertheless, there were trade unions, and they were not entirely absorbed with politics. Some of the things that Professor Gulick himself comments upon indicate that the Perlman thesis, perhaps overstated as a general theory, does contain an important element of truth in its emphasis upon job consciousness. For example, the repeated and largely unsuccessful attempts to reorganize the Austrian federation of labor along industrial lines (pp. 272-90), attest to the continued strength of craft separatism, in the face of the class consciousness preached by the socialists. The author seems to think that the apparent trade union interest in the problem of structure was not fundamental, for he remarks that "when the primate of the party was established, the trade-union wing, as modern psychology would style it, almost 'fled' into reorganization." Moreover, he appears to attribute the conflicts over industrial unionism, as well as the persistence of jurisdictional disputes, to "oligarchic tendencies [which] unavoidably arise even within the framework of the most democratic institutions." Yet at another point he records these interesting facts about the 1919 congress of the Federation: "Between the last (1913) and the present (1919) congress lay the fateful period of war and revolution; nevertheless, the report of the *Kommission* on these meaningful years was almost neglected. But when the congress turned to the question of reorganization no less than 44 individuals asked for permission to speak, and before the debate was closed 26 had expressed their views on industrial unionism."

Another illustration of differences in outlook between the party and the trade unions is afforded by the crucial issue of coalition. After leaving the government in 1920, the socialists were continually weighing the desirability of returning. By re-entering into a coalition with the Christian Social Party, they might have obtained several cabinet posts, and perhaps have averted the transformation of the army and the police, which had been radicalized after the first world war, into instruments that could be used against them. On the other hand, they would have had to share responsibility for some unpalatable economic and political decisions that were inevitable under the circumstances.

The socialists were, as Professor Gulick shows, on the horns of an almost insoluble dilemma. To remain in the government after 1920 might have strengthened the communists and impaired the unity of the labor movement. On the other hand, there were not a few within the party who agreed with Karl Renner that "the July [1927] occurrences were a consequence of the steady refusal to join a coalition government in past years. Only thus had it been possible for the opponents to transform police and army into willing tools of their policy and to arm the Heimwehr."

The trade union leadership appears to have shared Renner's views. Gulick quotes a revealing statement by a prominent trade unionist which perhaps epitomizes the divergent views of the political and economic branches of the labor movement: "We trade union men feel it on our hides that it is not a matter of indifference for the proletariat whether it is our highly respected comrade Hanusch who sits in the ministry of social administration, or a Pauer or even a Schmitz." (The latter two were non-socialist politicians, while Hanusch was a leading trade unionist.)

No one is likely to agree in every essential with the analysis and interpretations in *Austria from Habsburg to Hitler*. Nevertheless, reading this case study of democratic socialism in action affords an exciting intellectual adventure. It is far more than the history of the labor movement in a small country, for many of the problems treated are relevant today in all of western Europe: the constant threat of communism on the left, the dangers and advantages of coalition with center groups, the relationships between party and trade unions, the quest for an ideology suited to present realities. I hope that Professor Gulick's important work will receive the wide attention that it merits.

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The Brazilian Economy. By HENRY WILLIAM SPIEGEL. (Philadelphia: Blakiston Co. 1949. Pp. xv, 238. $4.50.)

This is a very valuable contribution to the growing literature on the economic problems of the other American republics. It is only in the last few years that any number of American scholars have turned their attention to the nations to the South and problems which they have to face. The works of Wyeth and Hughlett on the industrialization of Latin American were among the first studies of this kind, while the work of Ellsworth on Chile was one of the first attempts to tackle the problems facing one particular

country. The present work by Dr. Spiegel, who is an associate professor of economics at the Catholic University of America, is a welcome addition to this field.

Some of the difficulties of those who attempt to deal with the economic problems of the Latin American region are evidenced in Dr. Spiegel's work. With regard to most subjects with which the author deals, the statistical material is very sketchy. Dr. Spiegel does a valuable job in trying to assess the value of the available data, and to use them to get a general picture of the economy of the nation. However, as he indicates, about the only area in which statistical material is at all adequate is that of foreign trade. Because of the importance of taxes on imports and exports as a source of revenue for the government of Brazil, it has for many years kept quite accurate figures in this field.

In such fields as population, labor, agricultural production, national income, and cost of living, the material available for the economics student varies from not so good to nothing at all. And what is true of Brazil is true to a greater or lesser degree of most of the other Latin American nations. Perhaps Argentina, Chile and one or two other countries would rate a bit better in the quality of economic data available, but for the most part the Latin Americans have not been particularly interested in the collection and correlation of economic statistics.

Dr. Spiegel's book is notable for reasons other than the fact that it is a pioneer in the field. It is notable because it attempts to apply the national income approach to a comparatively "backward" nation. Indeed, he starts out his study with a chapter on the national income, indicating the distribution of income payments to various elements in the community, and discussing the problems of savings and investment in a country in which the great majority of the people have very small incomes.

The author then goes on to deal with what is perhaps the outstanding characteristic of the Brazilian economy, the fact that for more than one hundred years the country has been experiencing a virtually uninterrupted inflation. Dr. Spiegel concludes that this inflationary spiral was brought about in large part by the very large volume of exports, which resulted in the release in Brazil of a large quantity of money for which there was comparatively little offset in domestic production. At the same time, he notes that until the first World War, at least, these very large exports merely served to pay for the equally large imports of capital.

This long-range Brazilian inflation has generally been accompanied, according to Dr. Spiegel, by budget deficits and currency depreciation in addition to the export surpluses and inflow of capital which we have already noted. Since 1942, however, the trend towards currency depreciation has been halted, though prices have gone up even more rapidly than before. This is in large part due to the fact that exports are influenced more by the lack of domestic mass purchasing power than by the requirements of the balance of payments.

Dr. Spiegel feels that the fundamental necessity in Brazil is to increase the productivity of its agriculture and industry. This has been held back heretofore by the cheapness of labor. The author maintains that Brazilian

labor is still cheaper than that of the United States and other industrial nations, even when the very much lower productivity of the Brazilian worker is considered. He notes, however, that the power of the workers' organizations is growing and that labor costs are therefore rising, and he believes that sooner or later that tendency will make it necessary for Brazilian employers to introduce more machines and more efficient machines than have hitherto characterized Brazilian industry. He notes that in the textile industry this tendency is apparently already under way.

Industrialization is the principal method upon which Brazil must rely in the years just ahead, according to Dr. Spiegel. He discusses at some length the problems involved in industrialization, such as a small market, difficult transportation, scanty capital resources. In this connection, one misses a more adequate discussion of some of the labor problems facing the new manufacturing industries. He feels that much of the capital for the development of industry in Brazil must come from abroad. He notes that there was a strong emphasis on economic nationalism between the two wars, but that since World War Two restrictions on foreign capital have tended to be relaxed. He believes, however, that, though the Brazilians will tend to welcome foreign capital, particularly in manufacturing enterprises, it will have to come to Brazil on more equitable terms than were customary in the earlier era.

Dr. Spiegel also believes, on the basis of the evidence which he presents, that the Brazilian government will itself play a large part in this industrialization process. Not only will it extend the customary kinds of aid to infant industries—tariffs, tax reductions, subsidies—but the government itself will establish or help to establish many of these industries. He notes five such heavy industrial enterprises in which the government has been the prime mover during the last decade, and feels that this trend will continue. This, as Dr. Spiegel points out, is quite consistent with the tradition of economic behavoir in Brazil, where the ideas of *laissez faire* never had more than fleeting popularity.

In addition to these problems directly concerned with the growth of manufacturing, Dr. Spiegel devotes his attention to the agriculture and transportation of the country, noting the difficulties of the latter, and noting the changing nature of the former—the decline of the old staple crops of coffee, cotton and sugar, and the growing tendency towards diversification of agricultural production. He feels that the trend during the next generation will be towards more emphasis on food crops for consumption within Brazil, and less emphasis on the great export crops.

This volume is a trail blazer in its field. It is a very readable and very useful work not only for those particularly interested in Latin American affairs, but for anyone who is interested in the basic problem of the development of "backward" countries. And, if President Truman's inaugural address is any indication, this is a problem in which Americans will become increasingly interested.

ROBERT J. ALEXANDER

Rutgers University

Studies in the Development of Capitalism. By MAURICE DOBB. Rev. ed. (New York: International Publishers. 1948. Pp. ix, 396. $3.50.)

Maurice Dobb, lecturer in economics at the University of Cambridge, is best known for his studies of Soviet economy and his criticism in avowedly Marxian terms of current economic theory. In turning to economic history, he steps out of his customary role and addresses a subject in which he is not a specialist and for which he relies upon the findings of the more prominent workers in the vineyard. In his endeavor he retains his refreshingly frank Marxian position and views history from that particular vantage point.

Being, apparently, a fearless intellectual, Professor Dobb attacks at once one of the most bothersome points of his subject—the term capitalism. He will have none of Sombart's vagueness, which regards the institution as a *Zeitgeist,* or of the German historical school's attempt to identify capitalism with money economy. He lines up with Marx in the belief that what distinguishes capitalism most particularly and sets the period of capitalism off most distinctly from other periods of history is that under it workers were deprived of the means of production, that these means were owned by investors, and that workers were thereby exploited by their employers. Basic to this entire presentation is the labor theory of value.

This fundamental proposition conditions the things Dobb looks for in the development of capitalism. How, when, and why did workers lose the means of production; how, when, and why was ownership acquired by an employing class; how has the employing class used its economic and political power to maximize benefits to itself; and what have been the recent trends within the institution which may be projected into the future?

These concerns have led Dobb to throw overboard such categories as "merchant capitalism" and the Sombartian stages in capitalism. He adopts stages which are determined by the growth of the dispossessed, industrial proletariat. In his view the crucial turning points in England were the end of the "sixteenth century and the beginning of the seventeenth when capital began to penetrate production on a considerable scale" (p. 18) and in the late eighteenth and early nineteenth centuries with the industrial revolution. The Bourgeois got control of the means of production not primarily by accumulating capital out of income, but by taking advantage of shifting price differentials between types of property.

The ownership-of-the-means-of-production class has used its economic position to get political power and has sought legislation to give it monopolistic positions and control over labor. Mercantilism, for example, is regarded as a system of "state-regulated exploitation through trade. . . ." "State intervention tended to grow in countries of Western Europe in the fourteenth and early fifteenth century, which was a period of almost labor scarcity, and again in the seventeenth century, which was in France, for example, the age of Sully, Laffemas, and Colbert; whereas the nineteenth century, a period of abundant labor reserve and rapid increase in population, witnessed the greatest triumphs of *laissez faire.*" By the twentieth century, capitalism had reached a point where there was a "chronic fear of increase of products and productive capacity," "an arresting of technical development," and a threat of a collapse of the entire capitalist system.

Dobb has a neatly organized account, but he has imposed great limitations on it through his emphasis upon the labor theory of value. Surplus value undoubtedly arises from various factors of production and not from labor alone, at least, the historical record indicates that this is so. Hence capitalism as an institution has many facets which Dobb has largely ignored. Furthermore, he gives away a part of his case regarding labor theory of value as the distinct aspect of capitalism by stating that under feudalism, that is, before capitalism, the wealth of the lords resulted from surplus labor of serfs. Finally, what freshness and light there may be in the book are obscured by a wordy and turgid text.

SHEPHARD B. CLOUGH

Columbia University

Russia in Flux. By SIR JOHN MAYNARD. Edited and abridged by S. Haden Guest. (New York: Macmillan. 1948. Pp. xviii, 564. $6.50.)

The late Sir John Maynard wrote about Russia with an unusual perspective gained from a long career in another backward country, India, and with an authority derived from several visits (including one as early as 1895-96), as well as from independent study. This volume combines in abridged form two collections of essays previously published in England: *Russia in Flux before October* (London, 1941), and *The Russian Peasant: and Other Studies* (London, 1942). Running over virtually the whole range of Russian and Soviet life and history, the essays inevitably are rather uneven in quality. Unquestionably, however, some are first-rate contributions and the viewpoints expressed are interesting throughout. No student of Russia will wish to pass this work by.

Among the different essays, numbering twenty-seven in all, four discuss the currents of political, social and religious thought in Russia in the three-quarters of a century before the Revolution. These are probably among the most valuable in the volume. Maynard apparently did a prodigious amount of reading in Russian sources, and he manages to present in a brief space what seems to be a most comprehensive catalogue of the main intellectual figures and their thought, including, to mention only a few, the slavophile Khomiakov, the westernizer Chernyshevsky, Bakunin, the populist Mihkhailovsky, Tolstoy, Plekhanov, Struve and, of course, Lenin. The discussion is monographic in character and does not seem to focus on any particular thesis.

All of six essays deal with agriculture, including particularly Tsarist peasant living conditions, the organization of the Mir (which it is not generally realized was still, on the eve of collectivization, the dominant factor in Russian agricultural organization); the twists and turns in Soviet agricultural policy since the Revolution; the collectivization drive and the organization of the collective farm. These materials will be of interest both for the information assembled, though little seems distinctly new, and the interpretative comments, which are always challenging. While Maynard may tend to understate the initial peasant opposition to collectivization (p. 267), and at the same time overstate the mass support that has since been won for the new form of agricultural organization (Chap. XX), he is probably right in pointing to the war experience as indicating rank-and-file peasant loyalty

to the regime. In the light of the unrest during the collectivization drive many foreign observers were led to believe that the Soviet government might not be able to count on the peasantry in a national emergency. On the basis of his own travels in the Ukraine and North Caucasus in 1932-33, Maynard questions that there was anything like the severe famine there, leading to millions of deaths, such as many commentators reported at the time (pp. 249-50).

The materials on the evolution of Soviet agricultural policy should be read in conjunction with an all too brief essay on the controversies within the party in the 'twenties. Agricultural policy was one of the principal issues in these debates, and Maynard presents a very summary survey of the views held by different groups in the party on this and other questions, including industrialization, the status of the trade unions, foreign policy and so on. As Maynard suggests, the ideological differences between Trotsky and Stalin probably were not nearly as clear-cut as is often imagined. Certainly on economic questions, particularly agricultural organization and industrialization, Stalin at the close of the debates was at least as far to the left as Trotsky ever had been.

Unfortunately for the readers of this journal, the brief discussion of Soviet planning is altogether superficial, and will be of little interest to those familiar with any of the standard works on Soviet economics. It should be noted that, contrary to what is said (p. 341), the Soviet government was definitely interested in financing the first and subsequent five-year plans partly from foreign borrowing. Also, in view of the Labor Reserve School Act of October, 1940, to which reference is made, and certain other labor control measures instituted in the same year which are not discussed (see the reviewer's *Structure of Soviet Wages*, Cambridge, 1944, Appendix F), many probably will not share Maynard's opinion that "At all events the USSR is free from unemployment, and the choice of occupations is freer than in a country where young people must take the first job that offers, or else risk finding none" (p. 336). Except for a brief comment, no attempt is made by the author to grapple with the question of penal labor.

The balance of the essays, which space forbids us to comment on in any detail, includes several studies of a general historical character centering mainly on the three revolutions and the civil war; some studies on Soviet political institutions, which seem controversial at numerous points, particularly the purges; several essays on nationalities and religion; a summary appraisal of the living and working conditions of urban labor; a summary appraisal of recent currents in Soviet ideology, including the rôle of patriotism, attitudes toward the family, etc.; and a final and very provocative essay attempting to evaluate the Soviet system in terms of the opportunities provided for personality development.

At various points in his essays Maynard voices several familiar themes: the mass of Russians are little affected by or concerned with the vagaries of the police system, are mainly interested in security and economic and social leveling, and are probably not yet ripe for political freedom. These are, of course, all matters of opinion. Interestingly, the even more backward country

where Maynard spent his career seems now to be building its political system on quite different premises.

Unfortunately, these essays are much too loose-knit and their coverage too uneven to constitute anything like a systematic survey, suitable for textbook use. For specialists, their value is impaired by the lack of documentation. The general reader, however, will find this an unusually thoughtful and provocative book.

ABRAM BERGSON

Columbia University

Money, Banking and Credit in Mediaeval Bruges. By RAYMOND DE ROOVER. (Cambridge: The Mediaeval Academy of America. 1948. Pp. xvii, 420. $8.75.)

Drawing upon a long list of monographs and published documents and interspersing fresh data from Belgian and Italian archives, Professor de Roover has produced a noteworthy synthesis of financial history in an area where capitalistic institutions were relatively mature in the fourteenth century. Some important generalizations hold for the rest of Flanders as well as for Bruges; and, since many of the city's bankers were Italians, the study also bears on Italian history and parallels in part the author's *The Medici Bank*.

Following the Belgian historian Bigwood, de Roover finds that banking embraced three distinct groups: (1) the merchant-bankers, principally Italians, who specialized in foreign exchange; (2) the lombards, whose chief business was pawnbroking; and (3) the money-changers, mainly Flemish, whose operations evolved from "petty exchange" into deposit banking. Before the end of the mediaeval period Antwerp "inherited the position of Bruges as the financial metropolis of northwestern Europe," but by the turn of the seventeenth century Amsterdam outranked Antwerp. Definite links are established between mediaeval practices and banking in Amsterdam: the public bank of Amsterdam, founded in 1609, "performed the same functions as the Bruges money-changers and should be considered as their direct descendant."

The three classes of bankers did not form "hermetically sealed" groups, but it is significant that specialization was favored both by the business community and by legislation. (Thus, the money-changers were not allowed, and apparently did not want, to compete with the lombards.) Though realty doubtless formed the main type of wealth, no special market or institution catered to real-estate financing. Indeed, this aspect of credit is dismissed in a sentence: "Real estate owners could obtain credit more cheaply from institutions and private investors, interested in a steady flow of income, than from professional lenders." Public finance is similarly limited to casual statements: "Loans to public authorities . . . occasionally found favor with the lombards"; while the money-changers advanced funds to the city government "only in great emergencies." Lacking portfolios of mortgages and government securities, the money-changers made direct investments in commerce, particularly in the cloth trade; but even this was forbidden in 1477.

Money, Banking and Credit examines elaborately the problems of currency and short-term credit instruments and institutions; it answers few questions concerning long-term debt, either public or private, and the processes of capital accumulation.

In the fourth and fifth chapters de Roover reviews and expands his previous expositions of the mechanism of mediaeval exchange. Despite meticulous efforts to dispel false ideas of the subject, the discussion retains several puzzling statements. All important money markets were interrelated and arbitrage was practiced; monetary debasement as well as interest rates affected exchange rates; yet the "equilibrium of the money market required that the rate of exchange be always higher in that one of the two places which gave its currency to the other. . . . This rule is of general validity, and there are no exceptions" (p. 62). Is this an obscure way of saying that in a given market there was always a spread between the buying rate and the selling rate of a foreign currency? One hesitates to challenge an author who is sure that "on all these points [relative to foreign exchange] the demonstration given in this study is complete and decisive" (p. 353).

There are other points on which scholarly caution yields to undue speculation and assertiveness. A re-examination of the "widely current theory" that debasement "is explained by the dwindling supply of precious metals in Western Europe" leads to the conclusion that "temporary difficulties" (*e.g.*, adverse payments balances, work stoppage at the mints) were more important than any long-run factors tending to depress the price level. Although the evidence concerning the effects of monetary policy on the price level is "admittedly scarce," the author does not hesitate to affirm that Flemish prices "rose sharply during the fourteenth century and more slowly during the latter part of the fifteenth century." Subsequently, it appears that "for the fourteenth century there are no price series or index numbers available, but other documents give a fairly good idea of what was going on." On the other hand, "it would be dangerous to make any generalizations" in the absence of price statistics; but "their importance should not be overrated."

In conclusion, the author admits his inability to answer one important question: Were there business cycles in the Middle Ages? But seasonal fluctuations in the money market were commonly recognized by the bankers of Bruges; and, "if there are seasonal fluctuations, the existence of larger waves, that is, of cyclical fluctuations may be presumed and cannot be rejected *a priori*."

ROBERT S. SMITH

Duke University

Trois Essais sur Histoire et Culture. By CHARLES MORAZÉ. (Paris: Librarie Armand Colin. 1948. Pp. 62. 90 fr.)

These three essays, by M. Morazé, lecturer in economic history at the Institut des Hautes Etudes of the Sorbonne and one of the editors of *Annales*, are of importance for their emphasis on a return of man to a position of central significance in historical and economic study. In a brief foreword, the veteran Lucien Febvre compliments Morazé because, though in no sense

a pupil of his, the younger man has strengthened his hand in his lifetime plea for a geohistory, a history not stultified by the worship of mere *fact*.

Entitled respectively "From Facts to Man," "From Number to Man," and "Order and Method," these essays study the subordination of fact to space and time in human history, the inevitable intervention of man into his own statistical determinism, and the need for a restoration of philosophy in the history of culture.

Taking a single *fact*—the appearance of Jules Ferry at the head of the French government—Morazé demonstrates how far a fact is from being an absolute, and how it is linked with apparently remote elements in geography, time, and cultural history. History thus becomes psychological, "the life of Man."

In his discussion of number, Morazé traces the rise of statistical determinism in the 19th century, and then the inconsistent effort of man to level off the curves of his own dialectic of inevitable numbers. Thus in "Order and Method," Morazé arrives at a challenge to the effort to find a universal history of humankind on a parallel with the natural sciences; and he calls for a reversal of the present hierarchy of specialists toward that "infinitely more difficult and rarer" acquisition of "broad intelligence and encyclopedic reading" which alone can restore perspective in the history of man and man's culture.

WILSON O. CLOUGH

University of Wyoming

Economic Systems; Planning and Reform; Cooperation

The American Economy. By SUMNER H. SLICHTER. (New York: Alfred A. Knopf. 1948. Pp. vii, 214, ix. $2.75.)

This book is an analysis of the American economy—its problems and prospects—as seen by a celebrated economist. Professor Slichter first sets out to examine the basic characteristics of the economy. He next explores four of the principal problems of the economy, and finally gives an appraisal of its strong points and weaknesses. By way of introduction he states that the American economy is the most productive in the world (with six per cent of the world's population and an even smaller percentage of the world's labor force, the United States produces over one-third of the world's goods). He believes that the great strength of this extraordinary economy is little appreciated by the people of the United States, and even less so by the people of other countries. The economy has great problems, and its institutions are under attack.

Professor Slichter writes:

The economy itself is undergoing a basic transformation. About fifteen years ago power began to shift rapidly from business men and the self-employed to employees, who are by far the most numerous group in the community. This shift of power is still in its early stages, but is going on rapidly. The prospects of the economy are much in dispute. Many people

believe that it has become "mature" and that it is rapidly losing the capacity to grow. Other people think that the shift of power from employer to employees will undermine the spirit of enterprise and hinder the growth of industry—that no laboristic economy can be as progressive as a capitalistic one. Still other persons are impressed with the fact that industrial research is growing by leaps and bounds, and that the industrial revolution appears still to be in the early stages of its development. They count on rapid technological change to keep the economy dynamic.

Once these issues are set forth as the subject matter of the book, Professor Slichter outlines what he believes to be five principal characteristics of the American economy: (1) The economy is predominantly one of private enterprise; (2) it is a laboristic economy; (3) it is highly competitive; (4) it is highly dynamic; (5) the economy is highly self-sufficient.

While each of these propositions is qualified and documented, one cannot let them all pass by without some challenge. Certainly one cannot accuse Professor Slichter of being a conformist; he has persistently stuck by his guns in defending his wartime position that the vast blacklog of savings and deferred demands would maintain full employment during the postwar years, while many economists predicted millions of unemployed. Similarly, he is in the minority here regarding his position on competition. Most economists would probably agree that the economy has too little of the competition necessary to provide the most effective balance wheel for allocating resources into the most productive channels. While emphasizing that the American economy is highly competitive, Professor Slichter tends to give inadequate recognition to the significance of the rapid growth of corporate concentration of industry under investigation by the Antitrust Division of the Justice Department and the Federal Trade Commission. Relevant also to the monopoly question are the recent activities and revelations of the Senate Small Business Committee.

It is not difficult to accept, for the most part at least, his thesis about the economy, which he implies can be expected to become more "laboristic" over the long run. But this is also to be interpreted as meaning that strong *farmeristic* elements will be important, and merits consideration in evaluating any thesis that the economy is largely "laboristic" in nature.

Professor Slichter lists four problems which he believes stand out above all others in importance; some of these he believes are more political than economic. They are: (1) The problem of industrial relations; (2) The problem of economic stability; (3) The problem of international economic policies of the United States; (4) The problem of incentive to expand industrial capacity to increase production.

He emphasizes that the interest which the community takes in labor matters will largely determine whether management and trade unions cooperate effectively to increase output and to determine working conditions, and that it will determine in larger degree the nature of the impact of trade unionism upon the scale of values of the country. Thus, it becomes imperative that there be developed a generally accepted body of principles as a guide to settlements which are equitable and in the general welfare. Professor Slichter

believes that these principles must either be accepted by both parties or enforced by a national wage and arbitration policy. Several instruments for dealing with emergencies should be possessed by the government. He is against governmental seizure of plants. He thinks voluntary arbitration would be preferable when bargaining disintegrates. If this fails, he favors required arbitration. If one party or both reject the recommendations of an impartial emergency arbitration board chosen as neutral and competent by representatives of labor, the President (or the governor) might require both parties to try out the board's recommendations for six months or more. This prolonged "cooling off" period introduces an uncertainty which each party would wish to avoid.

While Professor Slichter's discussion of industrial relations is cogent and encompasses much admirable analysis, his section on the business cycle suffers from over-concentration. By way of stressing the role of savings and investment, he gives much attention to the need for tax revisions that would encourage more risk taking. Two steps should be taken to correct the present income-tax inequities. One is to permit income-tax receivers to pay a tax on their average income over a limited period of years; and, second, "... permit a substantial part of capital losses to be offset against general income in the year that capital losses are realized."

In his excellent chapter on international economic policy, he explains the job of ECA, the chronic shortage of dollar exchange, and the great need of the United States to import more goods.

After examining the pertinent facts Professor Slichter tries to dispel the belief that this is a "mature economy," and concludes that there are powerful forces still making it possible to have great technical progress. He lays the responsibility for this progress squarely upon the so-called "new laboristic society" that he believes is emerging. Its great challenge is to open ". . . the markets of the United States to the rest of the world and in developing far closer economic ties between this country and other countries." If this is done ". . . . the standard of living should continue to double every forty years or less."

While presenting a vigorous and provocative approach to the subject, this book is at the same time a thoroughly scholarly piece of work. It deserves to be widely read and digested, particularly by all those persons interested in maintaining our American institutions.

CHARLES D. HYSON

Harvard University

Individualism and Economic Order. By FRIEDRICH A. HAYEK. (Chicago: Univ. of Chicago Press. 1948. Pp. vii, 272. $5.00.)

The degree of civilization that mankind has yet attained, and any conceivable progress therein, has been, and will be, attained by planning. Progress in civilization has also been marked by, and is practically synonymous with, the release and development of the constructive powers of individuals and the suppression of their predatory tendencies. The task of social planning is to enable men to take joint constructive action that they cannot take as

individuals or private groups, to contract for their mutual benefit on the basis of mutual renunciation of antisocial practices, to suppress the socially vicious activities of those who will not make any such renunciation, and, for the rest, to give rein to the full and free expression of individual personality and talent in sole or collective endeavor.

Nothing, therefore, could be sillier than an attempt at serious contrast between planning and no-planning, in either the individual or social sphere, unless one is prepared to argue for improvidence, chaos, and the war of each against all, as the *summum bonum* of the human race. This is not the real choice that confronts us but rather where, what, and how much centralized planning there shall be, and how much individual responsibility. Our preference must be between the jungle and the jail, and most of us, I conceive, would like things to be about as far away from either of these extremes as from the other (unless, of course, we picture ourselves as the wardens of an incarcerated community industriously engaged in ministering to our whims). In the jungle there is, of course, no central planning while, for the inmates of a well-run jail, all individual planning, especially for escape, is either futile or damnifying to the central plan.

In *Individualism and Economic Order* Professor Hayek attacks, rather than as in his *Road to Serfdom* he seemed to me to skirt, the *essential* question. The book is a collection of previously published essays which, in some degree, attains the happy result of Simons' *Economic Policy for a Free Society* of being greatly more impressive as a whole than as a mere sum of the parts. The last two essays, however, on "The Ricardo Effect" and "The Economic Conditions of Interstate Federalism," appear to be a vermiform appendix with no function, *in this book,* other than to bring it to a size to which the publishers might attach a price tag of five dollars and still avoid the blush that must otherwise effuse even the hardened faces of their kind.

The first six essays "Individualism: True and False"; "Economics and Knowledge"; "The Facts of the Social Sciences"; "The Use of Knowledge in Society"; "The Meaning of Competition"; and "'Free' Enterprise and Competitive Order" are brilliant expositions of the general themes that, under an automatic system (that is, one that relies on the drives of individuals seeking their own ends), we build far better than we know, and that any sort of detailed central planning must, along with its lack of mobility and adjustment to kinetic conditions, inevitably lose the benefits of the immense store of dispersed special experience and information of which the social "know-how" is composed.

The three essays on Socialist Calculation (Nos. VII, VIII, and IX) conclusively argue that, in a collectivist regime, there is no possibility of optimum allocation of resources on the basis of consumers' preference, and, to this reviewer at any rate, carry the conviction that there is a negligible probability that this can be done anyway near as well as in even a far from perfect system of free enterprise. It is not so clear, however, that specific (narrow) ends may not be reasonably well attained in a collectivist system, provided free choice to the individual is a matter of little, if any, concern to the directorate. Though this was not the point at issue, one may expect from

Hayek's opponents the charge that he is comparing not ideals with ideals, or facts with facts, but the ideal theoretically obtainable through free individual enterprise with an ideal which some collectivists do not hold or with the disconcerting facts quite obvious, contumaciously denied, or shamefacedly concealed, in existing collectivistic societies.

The essential defects in such approximations to free enterprise as the world has yet seen lie in the lack of provision of a rational monetary system for a pecuniarily motivated "order" and in the consequent waves of involuntary unemployment with which all of them have heretofore been afflicted. The inclusion, as No. IX, of the essay on "A Commodity Reserve Currency" is Hayek's recognition of these defects and his prescription for their alleviation. Hayek's strong endorsement of this monetary reform should suffice to remove all suspicion of him as a reactionary (which he has, of course, never deserved) and to separate him from those who seem to believe that nothing new can be good as sharply as from those who are unaware that, if history throws a most uncertain light on what is good, it can at least suggest that what men in the past have always rejected (when, after long experience, they have had the chance) is a highly unpromising path for the present and the future.

FRANK D. GRAHAM

Princeton University

Business Fluctuations; Prices

Measuring Business Cycles. By ARTHUR F. BURNS and WESLEY C. MITCHELL. (New York: Nat. Bureau of Econ. Research. 1946. Pp. xxvii, 560. Tables, 201. Charts, 77. $5.00.)

This is the second volume in the series entitled "Studies in Business Cycles."[1] Impressive in scope and executed with painstaking care, the work presents a detailed, technical analysis of a method for studying the cyclical behavior of individual series. To those who place their credence in aggregative data or in composite indices of economic activity, the approach undertaken by Burns and Mitchell may appear complicated and time-consuming. But since our usual aggregative data have not, to date, adequately served either to support or to refute numerous hypotheses of economic theory, an atomistic analysis of business activities is likewise essential. As a preliminary to forthcoming monographs and to a third summary volume, the present work discusses numerous statistical tools and subjects several important causation hypotheses to valuable tests of significance.

From a detailed analysis of 1277 individual series in the United States, Great Britain, Germany, and France[2] and a partial analysis of many more,

[1] The first was *Business Cycles: The Problem and Its Setting,* by Wesley C. Mitchell, which the National Bureau of Economic Research published in 1927. Mitchell's earlier work, the pioneer and monumental quarto volume, *Business Cycles,* was published by the University of California, in 1913.

[2] Of this total, 76 per cent relate to the United States, 11 per cent to Great Britain, 7 per cent to Germany, and 6 per cent to France; the series cover production, transportation, employment, prices, inventories, sales, and monetary circulation.

the authors arrive at the following definition: ". . . a business cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle; this sequence of changes is recurrent but not periodic; in duration business cycles vary from more than one year to ten or twelve years; they are not divisible into shorter cycles of similar character with amplitudes approximating their own" (p. 3).

To determine the chronology of turning points in general business activity, the authors date the alternate peaks and troughs of seasonally adjusted, specific cycles occurring in each of the individual series included in the study, following the pattern of the definition just given. The series are chiefly monthly, to insure greater exactness in selecting the true turning points within years. From the consensus of turning points in these "specific cycles," the monthly dates of the "business cycle" are designated, not without qualms, but with a belief that this chronology, though approximate, is more trustworthy than any other devised to date. The turning points so selected generally harmonize with the annals of business and with the best known composite indices of business conditions in the United States.

Following the determination of business cycle durations, useful as a norm for comparison, Burns and Mitchell then introduce the statistical methods to be used by the National Bureau in the future analyses of individual series. The first set of methods involves five S (specific cycle) tables, usually based on a positive, trough to trough,[3] analysis of each complete cycle within a single series.

These enumerate:

S(1) the duration in months of specific cycles during expansion, contraction, and the full cycle: and the timing difference, in months, between specific cycle turning points and corresponding business cycle turning points, *i.e.*, the enumeration of leads or lags.

S(2) the specific cycles expressed as relatives: the absolute value for each full positive cycle is divided by the average of the absolute values for the corresponding full cycle; thus the inter-cycle secular trend is removed but not the intra-cycle trend. The index for each turning point represents a three month average[4] centered on the month containing the turning point, thereby partially eliminating the random fluctuations. Amplitudes are then derived for the expansion phase (positive difference), for the contraction phase (negative difference), and for the full trough to trough cycle (difference ignoring signs). Also computed for the two major phases (and for the full cycle) is the average change in the index relatives per month, obtained by dividing the amplitudes by the duration of the phase in months.

S(3) the secular movements as given by the average monthly standings in absolute units during expansion, contraction, and the full cycle, together with percentage changes from phase to phase.

[3] Series definitely established as inverted are treated on a peak to peak basis. Also many non-inverted series are treated on the peak to peak basis to offer more complete comparison.

[4] Sometimes less, depending on the duration of the complete cycle.

S(4) the specific cycle pattern, which is indicative of amplitude and which is an expansion of table S(2), showing the cyclical relatives of the full cycle in 9 distinct stages. Stages I, V and IX represent the beginning trough, the intermediate peak, and the terminal trough, respectively; stages II, III, and IV represent the index relatives for each third of the intervening expansion phase; and stages VI, VII, VIII represent the index relatives for each third of the intervening contraction phase.

S(5) the specific cycle pattern expressed as the average change per month between the 9 stages indicated in table S-4.

The second set of methods leads to the construction of three R (reference cycle) tables, representing the same individual series, but the relatives are now classified in accordance with the previously established turning points of the general business cycle.

These enumerate:

R(1) the reference cycle pattern indicative of amplitudes in the 9 stage set-up of table S-4. This permits direct comparison of the specific cycle pattern of table S-4 with the reference cycle pattern of table R-1.

R(2) the reference cycle pattern expressed as the average change per month between the 9 stages indicated in table R-1. It is interesting to note that the average monthly change during reference contractions may frequently be positive because of a continuing positive slope after the reference peak, although such positive increments here become smaller.

R(3) a general index of specific cycle conformity with reference cycles. The signs of amplitude differences during reference cycle expansions, contractions and the full cycle are examined. A similar investigation of signs is applied to the average change per month analysis.

As a summarizing measure, each of the S and R tables contains column averages representing the duration, timing, amplitude, and pattern of the cycles of individual series. Average deviations, between cycles, are presented for these factors. From the summaries of table S-4 and R-1, basic graphs are prepared for ease in interpretation (see chart 21). These graphs, which first struck the present reviewers as too complicated for ready comprehension, are really masterpieces of inclusiveness. From them the reader is able to obtain information regarding the average duration and its variability, the average amplitude and its variability, the average timing and a direct comparison between the slopes of the average specific and the average reference cycles.

In the examination of the many series included in the study, it was concluded that reference cycles of the same series bear a family resemblance to the average pattern (see charts 73 and 74). Likewise, the patterns of reference cycles for separate series were seen to differ characteristically. Averages of cyclical timing, amplitudes, and the average change per month, when subjected to tests of significance, were found to be significantly different among series. However, the authors observe "... that although cyclical measures of individual series usually vary greatly from one cycle to the next, there is a pronounced tendency toward repetition in the relations among the movements

of different activities in successive business cycles" (pp. 488, 491). It was also found that the variance ratios of full cycle durations were not large enough to be considered significant.

Arguments leading to the choice of the various statistical tools and methods (monthly data in preference to annual or quarterly data, seasonal adjustments, inter-cycle trend removal rather than a combined inter-intra-cycle trend removal, three-month averages at turning points rather than formal smoothing) are clearly enumerated in Chapters 6 through 8. The customary method of trend fitting and removal is abandoned because it tends to alter dates of the turning points, because it introduces greater uniformity in cyclical gyrations than is warranted, and because trend fitting is at best a rough approximation of true growth. It was observed that the elimination of random fluctuations by the application of "smoothing" formulas tends to change the dates of turning points (sometimes by as much as 6 to 10 months), tends to stretch out the durations and to dampen the amplitudes of brief cyclical phases, assumes an unwarranted inflexibility in the shape of cyclical rhythms since the formulas used are quite rigid, and does not eliminate random movements that extend over years.

In establishing the validity of averages as a basis of comparison, the authors were compelled to investigate the hypothetical influences of secular, discontinuous, and long-wave movements on general business cycles. For if these influences were predominant, the perusal of the average pattern of specific and reference cycles would yield trivial results. Using either the coefficient of determination (coefficient of correlation squared) or simple variance analysis by establishing significant groups, and sometimes both, the authors offer proof, though they grant it not conclusive,[5] that the above mentioned factors do not alter the course of business cycles with any degree of significance.

Following is a highly condensed outline of some of the hypotheses tested and the implications deduced:

1. a. Hypothesis—that secular change tends to expand cyclical durations and amplitudes whereas secular decline tends to dampen them.

   b. Deduction—with the exception of the amplitudes of call money rates, the influence of secular tendencies cannot here be considered significant.

2. a. Hypothesis[6]—that as industrial development progresses and a stage of "economic stability" is reached, business cycle durations tend to increase.

   b. Deduction—although the hypothesis may be substantiated by us-

[5] The authors point out the roughness of the use of simple variance analysis as a test of significance. Such a test assumes independence of the component elements which in fact is not true for cyclical components. Also, the series are in many cases too short in duration to permit any definite conclusion.

[6] By F. C. Mills, "An Hypothesis Concerning the Duration of Business Cycles," *Journal of the American Statistical Association*, December, 1926.

ing dates of turning points derived from Thorp's *Business Annals,* the addition of more recent fluctuations and the use of turning point dates derived from the present study fail to support the hypothesis.

3. a. Hypothesis—that the business cycles after 1914 indicate a definite structural change.

b. Deduction—that although there is an apparent tendency toward intensified cyclical fluctuations after that date, the apparition is not clear.

4. a. Hypothesis—that long waves of from 50 to 60 years in wholesale prices[7] influence the duration and amplitude of specific cycles.

b. Deduction—that although there is better evidence that an association exists between price trends and specific cycles in terms of cyclical duration[8] than in terms of cyclical amplitude, the sample series indicate that the relations among the cyclical patterns are broadly similar during the periods of expansion and contraction in wholesale prices. Also, the authors find it difficult to state with any degree of certainty that wholesale prices have distinct long-period turning points, offering as evidence the several portions of the curves which are actually quite flat for extended periods of time.

5. a. Hypothesis—that within major cyclical movements of from 9 to 10 years (Juglar cycles) there appear three minor cycles with an approximate duration of 40 months (Kitchin cycles).[9]

b. Deduction—that no arrangement of the Burns-Mitchell specific cycles in groups of three consecutive cycles produces an approximation to the Juglar cycles of 9 or 10 years duration.

An interesting general finding concerning the nature and dating of cyclical downturns is presented, not in the chapters on hypotheses, but in an earlier passage: ". . . when the turns in leading activities are comparatively 'flat,' crisscrossed by erratic movements and dispersed over many months, the turn in general business activity becomes elusive. The American business-cycle peak of 1937 approximates this type. . . . It may be noted parenthetically that this evidence [wide dispersion in the peaks of numerous series], so far as it goes, gives no support to J. M. Keynes' thesis that *"the substitution of a downward for an upward tendency often takes place suddenly and violently, whereas there is, as a rule no such sharp turning-point when an upward is substituted for a downward tendency.'* "[10] Here is ample evidence, if it be needed, that many of Keynes' original and undeniably brilliant contributions to economics require not blind acceptance as part of a system but critical empirical examination, verification, refutation, and re-synthesis.

Enough has been said to suggest the elaborate and careful nature of this

[7] Long waves as originally derived by N. D. Kondratieff.

[8] This was especially true during the contraction phase where variance analysis ratios proved significantly large.

[9] Hypothesis as formulated by J. A. Schumpeter in his three schema postulate.

[10] Page 83 and 83 n. The Keynes quotation is from his *General Theory,* p. 314. Italics supplied.

major contribution to the literature of cycle measurement and appraisal.[11] *Measuring Business Cycles* represents not only a synopsis of new statistical techniques applied to a very large number of cyclical questions, but also portrays in great detail the problems involved in applying many older techniques to individual series. As a systematic statistical analysis that may eventually lead to generalized explanations, the approach taken by Burns and Mitchell is by far the most significant effort made to date. Although the undertaking is tremendous in its scope, the development of the detailed picture of what happens during "typical" business cycles may prove tremendously fruitful.

No one can read this book without admiration for the care and scientific zeal of the authors. It exemplifies Wesley Mitchell's predominant intellectual passion throughout his whole life: the constant testing and searching to verify or to refute hypotheses and theories. It is good to know that the enormous loss to economics occasioned by Dr. Mitchell's death is at least mitigated in the field of cyclical research by the fact that the basic analytical techniques, established in this volume, will be further applied by Dr. Burns and the staff of the National Bureau in their continued efforts to produce "a systematic account of how business cycles run their course."

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Ralph C. Epstein

The University of Buffalo

[11] Minor criticism might suggest that the use of the phrase "rate of change," to designate an average absolute monthly spread between relatives, may not be the happiest use of terms; for such a measure represents an average monthly difference between two indexes but not the percentage rate by which anything grows or diminishes. But in other sciences, "rates" sometimes are expressed in absolute rather than proportionate terms (*e.g.*, velocity as, say, miles per unit of time) so the authors may be justified, and the reviewers merely picayune, on this point.

The Keys to Prosperity. By Willford I. King. (New York: Constitution and Free Enterprise Foundation. 1948. Pp. xvii, 242. $4.00.)

Intended as a restatement of "the basic essentials underlying national prosperity," this volume provides a sad commentary on what the proponents of the extreme right are willing to accept as "sound economics." Some of Dr. King's seventeen "keys to prosperity" would be accepted by nearly everyone wishing to retain a largely free-enterprise economy, although the full statement in certain cases reveals more than first meets the eye.[1] A few of the "keys," however, will make even ardent conservatives gasp. One is "Forcing of the thriftless to insure themselves and their families against the untoward vicissitudes of life," which is elaborated in the body of the book to mean no form of government-supported social security whatsoever and the substitution therefor of compulsory disability insurance, to be provided by private companies and paid for entirely by payroll deductions (p. 87). Dr. King believes that, "in large part," cases of individual need are due to "thriftlessness" (p. 86). Another key is "Avoidance of governmental deficits, in bad years as well as in good years." Another is "Withdrawal of government from the

[1] The seventeen keys are listed on page 233 of the book.

ownership, administration, or control of the operations of construction projects, farms, factories, banks, insurance funds, and transportation facilities." And, of course, there is the proposal that "the thrifty" be protected "from confiscation of their savings by taxation and otherwise." The reader is not told precisely what degree of progressiveness in tax rates represents "confiscation."

There are sections of this book which are reasonably satisfactory as an elementary exposition. But the scientific merit of the book as a whole is not unfairly illustrated by such passages as the following:

After 1929 in the United States, "Social security and unemployment insurance payments were used as bribes to keep people from working" (p. 23).

"Monopolies not sponsored by government, but yet able through monopolistic power to raise prices sufficiently to oppress the public, are and have been extremely rare and short-lived. . . . The more one looks into the matter, the more convincing becomes the evidence that in the United States, at least, all oppressive monopolies are protégés of government" (p. 27).

Since real "saving" was less in the 'thirties than the 'twenties, "the belief that 'over-saving' is a characteristic of depression would seem to lack any foundation in fact" (p. 45).

"The fact which [the Keynesians] overlook is that public spending to relieve distress nearly always perpetuates and accentuates that distress. In countries not rich enough to afford any considerable volume of charity, depressions are short-lived, for hunger soon compels able-bodied persons to accept jobs at the best wages obtainable. When the idle go back to work, production increases, and the depression inevitably fades away. In prosperous nations, by contrast, doles may keep millions idle for years, and their idleness brings about general depression, lessens the national output, and keeps the nation poor" (p. 81).

"When spending equals income, there obviously is no hoarding" (p. 131). But spending is defined to include not merely consumption but also "amounts spent for savings bonds, for life insurance, for savings-bank deposits, for building and loan shares, and for numerous other classes of investments" (p. 130).

"The facts thus far set forth make it abundantly clear that the prosperity of a nation is commonly bound up with that ultra-important ratio

$$\frac{\text{Net new spending power"}}{\text{Average hourly earnings}} \text{(p. 193).}$$

["Net new spending power" is defined as national income plus change in the sum of currency and total demand deposits.]

As a corollary, "Depressions are, therefore, brought about by the inflexibility of wage rates—by their failure to drop when the net total of new spending power declines" (p. 191).

"What labor monopolies, collective bargaining, strikes, minimum wage laws, and unemployment insurance have really accomplished is to cut down production, throw millions out of work, reduce total payrolls billions of dollars in a single year, discourage thrift, and promote inflation, lawlessness, and riots" (p. 213).

Passages such as these make it difficult to take seriously any of King's

proposals, which, on the side of maintaining economic stability, boil down to combining price stabilization through monetary control with wage rates made as flexible as dividends.

One final point will explain why I have chosen to devote this much space to a book of such dubious merit. *The Keys to Prosperity* is published by "The Constitution and Free Enterprise Foundation" and distributed by its parent, the Committee for Constitutional Government. There is apparently under way a program aimed at the colleges "to promote the free enterprise system and the best available book on economics, *The Keys to Prosperity*."[2] I must also report—with mingled sadness and mystification—that a brochure advertising this book (a "classic for today's students of economics as, for its time, was *The Wealth of Nations*") quotes a dozen laudatory opinions by "economists and other experts," at least six of whom are university economists with some national reputation.

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[2] From a purchase order and contribution blank issued by the Constitution and Free Enterprise Foundation.

Business Finance; Investments and Security Markets; Insurance

Corporation Finance. By HIRAM L. JOME. (New York: Henry Holt. 1948. Pp. x, 676. $4.00.)

Professor Jome has written a text for students whose only previous preparation has been a beginning course in economics. He has assumed, further, that most students using this book will not pursue further professional studies in the field. The book's scope, therefore, is considerably wider than that of most textbooks on corporation finance.

Part I on the Forms of Business Organization begins with a brief exposition of elementary accounting principles. These are based on the financial transactions of Bill Anthony, a "boy in your neighborhood," who subsequently goes into business with partners and eventually incorporates. This treatment lessens the danger that students will fail to see the connection of what they study with the everyday life they know.

The second part of the book is devoted to Corporate Problems. It includes chapters on corporate securities, capital structure, internal and external sources of financing and combinations. The treatment is not always reasonably balanced. The subject of working capital is discussed in about three pages, whereas three long chapters are devoted to combinations. For a nonprofessional student who is more likely to be concerned with small rather than large enterprise, working capital financing is surely a more important subject than corporate combinations.

Discussion of the legal phases of corporate finance, for the layman, should emphasize the need for conforming to the statutes and judicial precedents. Yet, discussing the legality of dividend payments, Professor Jome says that

paid-in surplus "should probably not be used as a basis for cash dividends," whereas the layman must be warned, first and foremost, that this is illegal in a number of states.

Part III of Professor Jome's book is headed Social Aspects of Corporation Finance, but actually includes a large amount of material ordinarily found in books on investment. There are chapters on the mathematics of investment, securities exchanges, the security laws, protective provisions in stock and bond contracts and investment trusts. Where the student is going to take a separate course in investments, as is often the case, a number of these chapters may be found inappropriate for the course in corporation finance.

There are well-chosen brief appendices that provide valuable readings for students.

The author has produced a readable, interesting text. Useful problems are placed at the end of the chapters. For nonprofessional students, especially those who are not going to take a separate course in investments and for whom considerable outside reading is not practicable, this book will be found among the most suitable available.

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Public Finance

Introduction to Fiscal Policy. By RICHARD W. LINDHOLM. (New York: Pittman. 1948. Pp. 248. $2.75.)

This book is intended to fill a pressing need felt by instructors in public finance for a more adequate treatment of modern views on fiscal policy than is obtainable in most textbooks. In the few instances where major emphasis has been placed on the relation of fiscal policy to income, employment, consumption, and the price level, there has been a tendency to slight important matters covered in textbooks patterned along more conventional lines. Yet, if both tasks are to be accomplished in the same volume, public finance texts might become extremely cumbersome. One possible solution of this problem is an auxiliary text like the present, of modest length, and not too expensive, for purchase along with the major text.

In his preface the author states that the book is to be read by the "average student of political science, education, sociology and history, as well as business and economics." Yet everything of importance for fiscal policy is "concisely and thoroughly treated." It may be asked at once whether either of these objectives has been, or indeed can be, achieved. Fiscal policy cannot really be understood without a grounding in monetary theory, and an understanding of business cycle theory must underlie any but a docile acceptance of fiscal policy dogma. It is also a question how far a treatment of fiscal policy running to 225 pages can be at the same time both thorough and concise. Thoroughness has indeed been achieved with respect to the range of topics considered, but at the cost, in some instances, of rather brief treatment. The book commences with an introductory discussion devoted to the

relation between the public and private economies, the development of the fiscal role of the government from World War I to the present time, and definitions of the terms commonly used in the field of fiscal policy. There follows a chapter on what modern fiscal policy includes, which forms the pattern for the remainder of the book. The *laissez-faire* and the interventionist attitudes toward public finance are contrasted, and types and goals of fiscal activity are discussed. Fiscal activity can affect not only the general level of prices, but relative prices as well, and thus the way in which resources are used. But it is also important to maintain the correct volume of consumption, to preserve the proper balance between savings and investment, and to avoid unemployment; and this in turn requires fiscal intervention to assure an economic distribution of income. These desiderata are then discussed in the main body of the volume, in relation to (1) revenues and (2) expenditures.

In the two major chapters, on revenues and expenditures, there are parallel sections on each of the following: desirable prices, a desirable consumption level, a desirable employment level and a desirable income distribution. Desirable prices are stable prices. The desirable consumption level is that which at the same time maximizes labor effectiveness and provides savings adequate to assure the introduction of efficient machines, as well as a demand adequate to assure that these savings will be invested. The desirable employment level is full employment. The desirable income distribution is that which minimizes the reduction of efficiency through inadequate income (p. 63). For the most part these desiderata are assumed, which is appropriate for those acquainted with the logic by which they are reached, but which is apt to leave that student at a loss who is untutored in such matters as the relative desirability of rising, constant, or falling prices; the role of the propensity to consume; the equality of savings and investment; the inflationary implications of full employment; and the economic effects of unequal distribution of income.

The chapter on the revenue system is introduced by a brief discussion of built-in revenue flexibility. While it is pointed out that this automatic corrective "can aid greatly" in bringing about stable prices, consumption, and employment and a desirable distribution of income, somewhat more space might have been devoted to disposing of the more exaggerated claims that have been implicitly made by those who rely on stable tax rates to smooth out moderate fluctuations in income. Some attention is given to shifting and incidence of taxation, whence the analysis proceeds to the relation of revenues to desirable prices. The difficulties of steering a course between inflation and deflation are pointed out, and the "adjustable tax plan" for achieving stable prices is discussed. This leads to a treatment of war and postwar inflation problems and how they were met, followed by a catalog of the ways in which revenue-raising activity affects consumption (taxes, commodity sales, government borrowing, effects *via* the interest rate and gold sales). The possibilities of achieving full employment by way of the tax system with a balanced budget are explored, followed by a discussion of the effects of taxes on investment and consumption, and the taxation of idle money. Appropriately, the author devotes a relatively large amount of space to the role of the

tax system (including state and local) in the redistribution of income. The author's argument (p. 129) that the carrying charges of the debt "are certain to bring about a greater concentration of income in the upper brackets" should be noted by those advocates of fiscal intervention who have minimized the importance of the economic effects of the public debt.

A discussion of the effects of expenditures on prices during different phases of the cycle is followed by details concerning the wartime experience, government operation of yardstick plants, purchase of gold, interest expenditure, and debt repayment. The use of government expenditures to achieve a desirable consumption level naturally receives a relatively large amount of space, but the framework of the book works against a really adequate treatment of the relation between fiscal policy and willingness to invest. Some interesting remarks are made with respect to pump-priming, however, the position being taken that this device is useless unless first "needed changes in the relationship of different economic factors have been made" (p. 170). The chapter concludes with a treatment of the possibilities of effecting redistribution of income through government spending; vertical redistribution of income, social security, education, interest payments, and agricultural expenditures.

A final chapter deals with problems of administration. The Employment Act of 1946 is summarized and discussed, followed by a treatment of the problems of debt management, government debt and inflation, and the effects of interest rate policy. The problems related to successful administration of taxes and expenditures are next handled, including those of creating an adequate reserve shelf of public works, contract-letting, timing and the like.

This book is a sincere effort to bring the problem of fiscal policy down to the level of the elementary student. If care is taken to supplement its materials with classroom discussion of the relevant underlying monetary and business cycle theory, it should fill a needed gap. The question may be raised, however, whether even in an "Introduction" it would not have been advantageous to include some discussion of the latter along with the treatment of fiscal policy proper.

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The Monetary Problem of France. By PIERRE DIETERLEN and CHARLES RIST. Published for the Carnegie Endowment for International Peace. (New York: King's Crown Press. 1948. Pp. xiii, 98. $2.50.)

This book by Mr. Pierre Dieterlen of the French National Economic Intelligence Center, in collaboration with Professor Charles Rist, is the second study of European monetary policies published by the Carnegie Endowment for International Peace. However, unlike Professor Leon H. Dupriez' account of the *Monetary Reconstruction in Belgium*, which dealt with the scope, technique, and results of the Belgian monetary reform,[1] the Dieterlen-Rist book is limited to describing France's problems of internal inflation and ex-

[1] For a review of Professor Dupriez' book by the present reviewer, see the *American Economic Review*, March, 1948, pp. 177-80.

ternal unbalance and then strongly advocating a solution along "classical" lines. The authors of the book, as Mr. Antonin Basch remarks in his foreword, urge such a solution "in plain and courageous language," not hesitating "to underscore the mistakes which were made and to emphasize what, according to their opinion, must be done to restore order and prosperity to the French economy."

Professor Rist, who wrote the preface and one chapter outlining the reversal in France's financial and economic policy in January, 1948, holds that France committed grave mistakes in the early postwar years. Military expenditures were increased after the liberation to a level that in no way corresponded to France's actual needs and was quite out of proportion to its resources; the government tolerated for several years a large budgetary deficit; and it embarked upon an extensive modernization and re-equipment program which was "on much too broad a scale considering the financial limitations of an impoverished country." These mistakes were further aggravated by the "obsession" with the theories of controlled economy and by the consequent attempts to achieve economic recovery "in an atmosphere of financial and monetary insecurity." To effect a "rational monetary policy oriented towards the return to a much greater freedom," Professor Rist recommends re-establishing domestic stability by balancing the government budget, renewing confidence in the nation's currency, and giving impetus to saving. Furthermore, since "reality is not concealed by throwing a smoke screen around it," domestic stability, according to Professor Rist, should be consolidated by creating open gold and exchange markets where the franc would be given a realistic value, thus restraining imports, stimulating exports, inducing the repatriation of French capital abroad, attracting private foreign investments to France, and last but not least, providing the necessary precondition to dishoarding private gold stocks (put at 3,000 metric tons or 3.4 billion dollars). With the help of the European Recovery Program, which enables France to import certain essential products without straining its foreign exchange market, Frenchmen could then face "fearlessly" the new freedom.

Some, though by no means all, of the ideas put forward by Professor Rist became official policy in January, 1948; yet, a new outburst of inflation occurred in the second half of 1948. In undertaking to explain why inflation is chronic in France, Mr. Dieterlen's masterly analysis, which constitutes the bulk of the book, so guides us through the labyrinth of France's currency and public finance that even the events subsequent to the completion of the manuscript (early 1948) appear in sharper perspective. That Mr. Dieterlen's survey does not appear outdated is due to the fact that the author traces the postwar developments back to the 'thirties while simultaneously concentrating upon the broad lines of the narrative rather than embroidering it with incidental details. As a result, the mosaic of French contemporary currency and public finance that he sets forth appears highly instructive and very interesting.

Mr. Dieterlen's analysis brings home to the reader the complexity of France's monetary problem. First of all, as the author rightly points out, French monetary and fiscal policy is "incomprehensible" without bearing in

mind French politics—the "liberation psychosis," the swing to the left in the political assemblies, the disrespect of law ("a penchant quite in conformity with French temperament"), etc. The "anarchic attitude" that is a sequel of wartime demoralization was further aggravated by the inability of the French government to organize effective rationing that would assure the vital minimum to all its citizens. Under this "endemic disorder" any attempt at disinflating was exceedingly difficult.

Furthermore, the French government coalitions between the Socialist and Center parties brought about constant vacillation between economic controls and a liberal economic policy. Inconsistent compromises had to be made between those who favored controls and those who rejected them in principle while tolerating them for reasons of expediency. Yet, in Mr. Dieterlen's words, the "French economy remains a capitalist economy; to maintain a certain number of excessive compulsions, and particularly monetary compulsions, is inefficient as well as detrimental to its mechanism. It is therefore necessary either to radically transform the economic system of the country (with all the political consequences that such a transformation implies) or to readjust the monetary policy to the pattern of the existing economy."

Finally, although Mr. Dieterlen agrees with the French planners that the solution of France's monetary problem "requires 130 per cent of the 1938 production" (actually industrial production is above prewar while agriculture is still below prewar), he strongly objects to any inference that "apart from external loans negotiated between governments and from the combined modernization of basic industries, there is no salvation for French economy and its currency." Indeed, the author sees "other possibilities," along the lines of Poincaré's stabilization of 1926-28.

As Mr. Basch reminds us in his foreword, Professor Rist had "his share" in Poincaré's program; and the dominant impression we get in reading the book is that the authors are firmly convinced that France today can benefit from its own experience of twenty years ago. Is there, however, any such analogy between the problem that France faced in 1926 and that which confronts it today? As an answer to this fundamental question, let me point out that, at the start of Poincaré's stabilization, the level of production was higher in France than in 1947-48; the government budget was broadly balanced; and stabilization could be accomplished through a simple change in the psychological climate: to renew confidence it was sufficient to persuade the French to refrain from demanding repayment of national defense bills and from sending abroad the francs thus obtained. Although the difficulties which France faced in 1926 should not by any means be underestimated, its present economic ills are much deeper today. France consumes more than it produces and is living on its capital and on other nations' aid; its public finance position, in spite of the genuine improvement this year, remains uncertain; and quite apart from balancing the government budget through additional taxation, it must save enough to finance the large-scale investments it embarked upon to make good the war damage and the neglect of the interwar years. Under these circumstances, monetary stabilization is a more complex undertaking than twenty years ago. Yet, Dieterlen and Rist rightly

insist that without monetary stabilization no real economic and social progress can be achieved, and that by putting in order its money and public finance, France can enhance its stature in the Atlantic community.

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New York, N.Y.

Monetary Reconstruction in Italy. By BRUNO FOA. Published for The Carnegie Endowment for International Peace. (New York: King's Crown Press. 1949. Pp. x, 147. $2.25.)

Unlike its predecessors which were by European authors, this third book in the Carnegie Endowment series on European monetary policies was written by an American citizen, a consulting economist by profession and advisor of the Italian Economic Delegation in Washington. Yet, in reading this excellently written book, one is struck by the warmth of its author's feeling for his native Italy.

While full of comprehension for Italy's "truly formidable difficulties," the author is on balance critical of Italy's economic and monetary policies during the period from 1945 until early 1947 when the wait-and-see policy was finally abandoned. He, however, greatly admires the policy since 1947—the "financial masterpiece" of Luigi Einaudi, a professor of economics who, after an enforced semi-retirement under the fascist regime, reached high office in his seventies, serving successively as governor of the Bank of Italy, Deputy Prime Minister and Minister for the Budget, and President of the Italian Republic. The bulk of the book depicts the Italian inflation in terms of this fundamental approach, while the two concluding chapters deal with monetary and economic reconstruction, both through Italy's own effort and through the Marshall Plan.

Italy's inflation, by-product of the fascist economic and military adventure, was accentuated by the post-liberation drift "along the lines of least resistance." In the first place, according to Foa, the Allies were at fault because they neglected what might have been done to mitigate the impact of their expenditures in Italy (Foa holds that the military lira rate was inflationary—an allegation denied by Southard in "The Finances of European Liberation"). Secondly, the Italian policy-makers and administrators, veering toward *laissez faire* and deferring to the "views and whims of minor American officials," "welcomed the practical difficulties" that stood in the way of economic controls, thus buying economic freedom at the cost of additional inflationary pressure. Thirdly, as a result of an "unstable but working compromise" under which the conservative parties agreed to sliding wage scales and the freezing of employment in industry while the leftist parties refrained from pressing for extensive social reforms, wages caught up with or by the end of 1947 even outstripped the increase in the official cost of living—the comparative social peace of this period being secured at the price of a further impetus to inflation. Fourthly, the continuous government deficit financing, while to some extent merely reflecting the inordinate price rise, is blamed for the large additional inflation of 1946-1947. Finally, the premature, partial restoration of the free foreign exchange market in March, 1946 injected into the Italian economy "the

vagaries inherent in exchange depreciation." The new exchange regime was "unsettling," as well as "ultimately incompatible" with the maintenance of domestic price stability.

Among his criticisms, the author puts considerable emphasis on the absence of a "major operation on the currency," which would have entailed a temporary blocking of currency and a capital levy on liquid assets. Had such an operation been supported by conservative economic and financial circles, it would have had "a very good chance of success." Actually, the advocacy of stringent monetary and tax measures was left to the radical parties, while the opinion of those who supported such measures on purely technical and economic grounds carried little weight "in an atmosphere dominated by old-fashioned economic theories." Indeed, the Italian economists and the government were "excessively influenced" by concern lest a currency freeze be detrimental to "confidence" and the propensity to save. In any event, having discarded the idea of a currency reform, the government adopted a "spurious compromise" by simultaneously floating a long-term loan exempt from any future capital levy and declaring its intent to introduce such a levy in the near future. The loan was actually issued and a capital levy adopted, against the background of a rapidly deteriorating situation.

Finally the Bank of Italy, far from being "a purely passive vehicle of government policy," took the initiative in April and again in August, 1947 to arrest the inflation by "a vigorous and ruthless dose of credit control." As was repeatedly emphasized by Mr. Einaudi in defending himself against "savage criticisms," this was not a deflation but "a natural and necessary corrective"—a surgery, not therapy. The effects of the new policy on the exchange rates and prices were "sensational"; under the impact of large-scale dehoarding these dropped sharply, thus paving the way toward a new stablization. In November, 1947, the lira became officially a floating currency—"an extremely bold and novel experiment," which turned out to be very successful.

The author is fully aware that his strong criticisms of the pre-Einaudi era may appear inconsistent with his post-Einaudi praise. To take an example, why should the floating lira of 1946 be bad while that of 1947 was excellent? In the author's opinion, the justification of 1947 rests partly on the differences in the underlying conditions, but essentially on "the vigorous prior intervention in the field of credit which had shaped the underlying economic conditions to such an extent as to make it possible to move toward a free exchange market."

Against the bright side of the Einaudi policy, the author sets its shadows—a 20 to 25 per cent decline in industrial production towards the close of 1947, as compared with the early months of that year. Yet the credit restriction, although quantitative rather than selective, "was not too severe." Indeed, it was necessary in order to "dam the tide of inflation" in a situation that was highly explosive. Another drawback was the growing recourse by industry to government credit, either directly or through the I.R.I., the powerfully government-controlled industrial holding company. The unexpected by-product of the Einaudi policy was thus a shift of the financing burden from the banks

to the government and the growing control of the government over large segments of industry. Last but not least, Italy's industrial economy was so weakened by credit restrictions that there resulted a "ludicrous" situation in which it was unable to absorb fully the fuels and raw material made available under the ERP. Under these circumstances, the author suggests stepping up the rate of Italy's industrial output to the level required to effectively absorb ERP aid. "Grave doubts," however, remain as to Italy's ability to reap the full benefits of ERP.

"Dominated by a combination of obsolete ideas and brilliant improvisions," Italy's economic policy arrested the inflation in 1947, while in 1948 it made remarkable progress toward closing the gap in the balance of payments. There is, however, another side to the picture. The balance-of-payments deficit has been cut merely because Italy's industrial output and national income, and therefore her imports of industrial raw materials and foodstuffs, have been lower than they would have been under conditions of fuller employment. In other words, Italy has solved its balance-of-payments problem largely at the cost of chronic unemployment, the present level of unemployment being almost twice the prewar. With a "bolder, more dynamic, and more aggressive" policy, such as Mr. Foa advocates in his conclusion, Italy might attempt to increase the rate of investment and the standards of consumption; but at what level, and in what way, would it then be possible to close the balance of payments? This is the fundamental dilemma that not only Italy but other ERP countries, together with the ECA, face today.

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Public Finance. By William Withers. (New York: American Book Company. 1948. Pp. ix, 489. $4.25.)

At the beginning of his preface the author states that he has prepared this general text "only because of the urgent need for a *Public Finance* conceived along new lines." The average American reader will infer that he means along Keynesian or New Deal lines, though by implication he criticizes existing texts, not only for their failure to integrate public finance with the main body of economics, but also because of: (1) their over-emphasis of factual detail and inadequate treatment of fiscal problems, (2) meager consideration of the American background of economic and political trends, (3) failure to maintain a socio-economic point of view, (4) failure to recognize the conflicts in economic and political philosophy which underlie all public finance thinking and discussion, (5) failure to view "public finance as a crucial aspect of the growth of the public economy and to appreciate its relationship with the private economy, and (6) lack of "a simple style which the student can follow without undue effort." He goes on to say:

> If there is one major purpose of this book, it is to present the problems and conflicting issues which have arisen from the increasing encroachment of public finance on private enterprise. The theory and content of public finance are changing rapidly with the changing relationships between business and government. The author is aware that the New Deal is but one aspect of

a world-wide trend toward greater public economy. He believes that the teacher has an obligation to create an awareness of this trend in the minds of his students and to give them some appreciation of the seriousness of its implications.

The text, which is not more than half or two-thirds as long as most similar treatises in this field, is divided into six parts: introduction, public revenues, public expenditures, fiscal coordination, public debt, and the economics (incidence and effects) of public finance.

Aside from its emphasis upon Keynesian doctrines, one of the most unusual features of this volume is its Introduction. This takes up one-fourth of the entire text and is composed mostly of what might be called a tax or financial history of the United States. Thus the author supplies the background which his preface implies others have unfortunately overlooked. He sketches 150 years of the perennial conflicts of the large commercial, financial and other business interests on the one side, with the farmer, labor and small merchant interests on the other side—the struggles of the Jeffersonians against the Hamiltonians. Ardent New Dealers will be much more pleased with this sketch and interpretation than will their partisan opponents. The latter will probably dub the Introduction and, in fact, the whole book "propaganda," whereas the author considers it much needed educational instruction or illumination.

Except for the Keynesian slant (not all of which is as new or radical as some seem to think), the treatment of the important taxes and classes of revenue commonly employed in the United States is not greatly different from that of most texts. Because of the long introduction and the smallness of the volume, less than the usual amount of space is given to the discussion of various taxes, expenditures and other phases of public finance.

The author accepts, and presents more clearly than many, most of the Keynesian theories of over-saving, under-investment, "pump priming," compensatory taxing, spending, borrowing and debt management. He approves particularly the use of fiscal policy to control business cycles and to provide full employment of labor and resources, but repeatedly emphasizes "that public expenditures constitute a more effective business control device than taxes."

He is usually careful to present traditional views as well as newer theories so that the student can compare their merits and weaknesses. This, together with his numerous introductory and summary outlines—often in question form—make his text unusually provocative and teachable. There are so many controversial matters, however, and so much is necessarily omitted from such a small text that the instructor should be unusually well prepared and not have too large a class for two-way discussion.

The author apparently has no doubt that there will be a growing acceptance of Keynesian doctrines and a more than proportional, as well as an absolute, growth of the public economy as compared with the private economy; in fact, that this is necessary for the survival of private enterprise—if its survival is possible.

It does not seem appropriate to itemize minor errors and inaccuracies which

are not more than usual for a first edition. Though this volume does not contain anything that cannot be found elsewhere, it is, nevertheless, a good brief presentation that should be made, and as such it is a welcome addition to the growing supply of texts in this field.

Apparently the author, after more mature thought, decided he may have overstated his case and that he should hedge it with a caution. At any rate, the reviewer was interested to find at the end of the volume the following which is a very good summary of what he had decided to say by way of comment:

We must exercise caution in using public finance to control business fluctuations. Economists are by no means in agreement as to the causes of business cycles. Until these causes can accurately be isolated and measured, fiscal policies for control cannot be planned with assurance. The cure of the business cycle "disease" is now in an experimental stage. Economic "doctors" prescribe remedies based on hypotheses rather than on sound scientific knowledge. Furthermore, the fiscal system is only one among many influences on the economic system, and its effects in bringing recovery must not be overemphasized. To be sure, public finance exercises a broader and more powerful influence as the public economy grows. This growth may now have proceeded to the point where the public economy is the central balancing influence even in the United States, but other factors must not be forgotten, such as interest rates, the size of inventories, market speculation, and the rate of private investment.

While the reviewer is inclined to agree that, under certain conditions, there is probably much validity to many of the proposals of the author (who is much less extreme than some), he nevertheless considers that several of the fundamental assumptions have not been proved and does not agree that the "burden of disproving" these assumptions and conclusions based upon them "rests with private enterprise" any more than the burden of proving them rests with the proponents of the suggested changes.

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British Block Grants and Central Local Finance. By R. E. Carlson. Johns Hopkins Univ. Studies in Historical and Political Science, Ser. LXV, No. 1. (Baltimore: Johns Hopkins Univ. Press. 1947. Pp. 222.)

It must always be very difficult for an outsider to grasp the significance and nuances of such intimate features of another country as are implied in its central/local fiscal relations, at least without extensive personal contacts. Professor Carlson has been singularly unlucky in the timing of his study of the British system of exchequer grants to local authorities. The war prevented him not merely from making such contacts, but also from obtaining access to a number of research studies relevant to his subject. It also greatly delayed not merely the completion of the work, which bears somewhat obvious signs of having been written at different periods, but also, it would appear, its publication. In spite of the use in the last chapter of an article on Derating which was published early in 1945, the analysis of the book essentially ends

with 1944. Since that date there has been a complete revolution not only in the grant system, but also in many of the powers and duties of local authorities which affect their financial position.

While these difficulties and deficiencies must seriously detract from the general usefulness of the book, Professor Carlson has brought together a great deal of information dealing with the grant system since 1888 which will doubtless be serviceable to American students who have not convenient access to further reading. The earlier chapters deal with the period up to the Local Government Act of 1929; the treatment is purely descriptive, and Professor Carlson relies heavily on secondary sources such as Dr. Newcomer's *Central and Local Finance* and my own *Finance of British Government.*

There follows a chapter on local government finance in World War II which is perhaps the best in the book—Professor Carlson has worked carefully through the documents—but apart from exhibiting in exaggerated form the traditional process of pull baker pull devil between the Treasury and the local authorities, by which changes in British local finance normally come about, the episode is now of historical interest only. The one substantial change of function, the nationalisation of fire brigades, has already been reversed—somewhat to the chagrin of the local authorities who now find themselves saddled with a vastly expanded service, quite unnecessarily elaborate for normal conditions.

Of scarcely more than historical interest also are the postwar plans which Professor Carlson examines at length in the following chapter. So far, things have not turned out much like that—except for the emphasis an equalising rateable value per head, on the one hand, and crude population figures on the other, as exclusive measures of the appropriateness of areas for local government purposes (a policy which can be directly traced to the Labour Party and National Association of Local Government Officers plans), and which is now being embodied, on the one hand, in the grant provisions of the Local Government Act of 1948, and on the other, in the efforts of the Local Boundary Commission to amalgamate counties which have substandard populations, much against the desires of the inhabitants, and regardless of physical features and natural lines of communication.

While not wishing to cavil over details, it is perhaps desirable to draw attention to certain points in which Professor Carlson's statements tend to give a misleading emphasis. In the first place, the importance of differences in valuation practice is exaggerated (and hence the usefulness of Rateable Value per head as a measure of relative wealth is underestimated). This is not Professor Carlson's fault: he was unaware of the very important information on rents and rates collected by the Ministry of Health and analysed by my husband and myself.[1] These figures are relevant to the problem of grants in at least three respects: (1) There is virtually no evidence of deliberate undervaluation in order to improve eligibility for grants; (2) on the contrary, a persistent tendency was observed for the poorer areas to be more highly valued than the more wealthy—an additional reason why the grant system

[1] *The Problem of Valuation for Rating,* Cambridge Univ. Press, 1943.

has been less equalising than was hoped; and (3) as a partial explanation of (2) there has been in the interwar period a persistent undervaluation of small new (post-1918) houses in relation to others. Thus, prior to the derating of industry, houses were, by current valuation practice, already enjoying a substantial degree of "derating," a circumstance which partly explains the agitation for industrial derating, as constituting in a sense a compensation for industry.

Again, it is not (as stated on p. 71) the assessment of rates on occupiers which gives rise to interlocal shifting of population; this is an inescapable phenomenon of any local tax where liability varies substantially from area to area. Nor was there "widespread default" by ratepayers during the depression; on the contrary, default was much lower than for the property tax in the United States. Indeed, the evidence suggests that a tax assessed on occupation can be more easily collected in depression than a tax on ownership; especially when liability represents only a modest proportion of even the unskilled labourer's budget—as is the case with rates,[2] thanks to the presence of the grant system.

Finally, on the problem of size in local government areas, it is very easy to exaggerate the wastes due to uneconomically small areas in the British local government system. In one sense, the problem has never been solved merely because the optimum size has continually expanded with improvements in transport and in administrative technique; in another sense, with the concentration of services under the county councils and county boroughs—a process which has been proceeding for a generation—it has lost, in the view of many, the greater part of its significance. The County Councils now administer directly the services for which a large area is appropriate.

The greatest weakness from which Professor Carlson's book suffers—and this again is not Professor Carlson's fault—is the omission of the revolutionary changes in local/central financial relations which have taken place since 1944. Here it is not possible to do more than list some of the most important of these. In the first place, the transfer of virtually all their trading services to national bodies has lost local authorities some revenue; but much more important, it has taken away a great slice of their more interesting powers and duties, thus seriously reducing popular interest in local government. The power of the central government has also been increased by denying local authorities direct access to the capital market, under an arrangement that looks like being permanent. Thirdly, the new health service, operating from the summer of 1948, has transferred local authority hospitals to *ad hoc* regional authorities (combining local authority and voluntary hospitals) thus removing an important source of disequalising expenditure. At the same time, it is already evident that both the health service and the educational changes are going to be much more costly than was originally envisaged; so that eventually the pressure on local treasuries will be heavy.

Transcending all other changes in importance, however, are the provisions

[2] *Cf.* J. R. and U. K. Hicks: *The Incidence of Local Rates in Great Britain,* Cambridge Univ. Press, 1944.

of the Local Government Act of 1948, and more particularly the new grant regulations, which substitute an "equalisation grant"[3] based, almost solely, on rateable value per head and current expenditure, for the block grant, and available only to those areas whose rateable value per head (as adjusted by the provisions of the act) is less than the national average. In this new system traditional Treasury caution has been thrown to the winds, not merely in acceding to an annual revision of grants, but also in agreeing to underwrite additional local expenditure in a manner which, viewed in the light of the past, is frankly staggering. It is already apparent that the invitation to additional spending by the poorer areas is not falling on deaf ears.

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[3] *Cf.* U. K. Hicks: *The Grant Provisions of the Local Government Act,* Bulletin of the Oxford Institute of Statistics, January, 1948.

International Economics

Foreign Economic Policy for the United States. Edited by SEYMOUR E. HARRIS. (Cambridge: Harvard Univ. Press. 1948. Pp. xiii, 490. $6.00.)

An excellent group of essays by twenty-four economists and civil servants has been brought together in this volume by that most indefatigable of editors, Seymour E. Harris. The book does not attempt to cover all aspects of American foreign economic policy; there is no mention, for instance, of shipping, aviation, or telecommunications, no discussion of the work of the Economic and Social Council of United Nations, the International Labor Organization, or the Food and Agriculture Organization, and no systematic consideration of problems relating to strategic resources, economic development, or international investment. But the central issues of policy are presented with clarity and subjected to penetrating analysis.

The book is divided into five parts. In the first, Thomas C. Blaisdell, Jr., and Eugene M. Braderman describe the organization through which the government of the United States formulates and administers its foreign economic policies. In the second, eight authors outline the problems presented to American policy-makers by the economic difficulties of other countries; John M. Cassels and Randall Hinshaw write on Great Britain, J. K. Galbraith on Germany, Robert W. Barnett on Japan, Robert B. Bryce on Canada, Henry C. Wallich on Latin America, Paul A. Baran on the Soviet Union, and John D. Sumner on China. The essays in Part III deal with international agreements and agencies: Allen G. B. Fisher and Camille Gutt explain the policies of the Bank and the Fund, Winthrop G. Brown describes the General Agreement on Tariffs and Trade, and Harry C. Hawkins discusses the problems that arose in negotiating the Charter of the International Trade Organization. Part IV is devoted to the European recovery program: Edward S. Mason is concerned with its significance in terms of political strategy, Sidney S. Alexander with the extent of Europe's needs, Calvin B. Hoover with the prospects for self-help and mutual aid, Kirtley F. Mather

with the relation of the program to American resources, and Lincoln Gordon with the operating problems of the Economic Cooperation Administration. In the final section of the book, the theoretical issues raised by the concept of fundamental disequilibrium are discussed by Alvin H. Hansen, Gottfried Haberler, Paul A. Samuelson, Robert Triffin, and Thomas Balogh.

No reader of these essays can fail to be impressed with the increasing scope and complexity of the international economic interests of the United States, the predominance of our influence, and the extent of our responsibilities. We must learn how to deal with the complete collectivism of the East and the partial collectivism of the West. We must put our defeated enemies back on their feet and, until we do so, we must continue to feed them. We must finance the reconstruction of Europe, insure the recovery of production, and promote the expansion of trade. We must contribute to the economic development of the backward areas of the world. We must take the lead in organizing and strengthening the agencies of international cooperation. And we must act, in all of these matters, with such wisdom, skill, and circumspection that other nations cannot take offense. This is the prescription; it will not be an easy one to fill.

The central theme of the book is the shortage of dollars. It appears in the discussion of the British balance-of-payments deficit, in the description of the economic prostration of Germany and Japan, in the study of trade between the East and the West, in the examination of the problems of Latin America, and in the analysis of the difficulties of Canada. It explains the qualifications that have been written into the postwar agreements on currency and trade and the disappointing performance, up to now, of the Bank and the Fund. It justifies the European recovery program. Most of the authors touch upon this subject, in one way or another, and many of them discuss its causes and explore the possibilities of a cure.

Among the causes, emphasis is placed by some of the contributors upon such structural maladjustments as disorganization of production, international indebtedness, loss of foreign assets, markets, and earning power, and relative changes in productivity, and by others upon mistaken national policies: heavy public expenditures, monetary mismanagement, and the inability or unwillingness of governments to permit necessary adjustments. The prospects for the restoration of equilibrium are viewed with varying degrees of skepticism. Balogh and Haberler represent the two extremes. According to the former, balance between the United States and the rest of the world is unobtainable: the superior technical efficiency of American industry will enable it to undersell its competitors all along the line. According to the latter, balance can theoretically be achieved through adjustment to new conditions of comparative cost; but it is recognized that adjustment may be obstructed by politics. As Samuelson remarks, moreover, disequilibrium may persist as long as the United States is willing to lend and lose and lend again. There is no disposition, however, to force a restoration of balance by prompt alteration of rates of exchange; a free market, at the present time, would not evoke an adequate flow of trade; it would reduce Germany, Austria, Greece, and Italy to starvation and chaos; it would impose upon Western Europe and the

United Kingdom a standard of living that might prove to be politically untenable. But most of the authors would agree that a solution must eventually be sought in devaluation of currencies, suppression of inflation, and enhancement of productivity abroad and in maintenance of employment and increasing absorption of imports by the United States.

Mr. Harris is apparently a strong believer in freedom of speech. At any rate, he has permitted his book to close with a slashing attack on American policy that is frequently inaccurate, generally ill-tempered, and completely inconsistent with everything that has gone before. Mr. Balogh, in the concluding essay, denounces the Bretton Woods Agreements, the ITO Charter, and the General Agreement on Tariffs and Trade, and presents a special plea for the adoption, by the United Kingdom, of a permanent policy of deliberate and systematic discrimination.

Most of England's troubles, it appears to Mr. Balogh, have their origin on this side of the Atlantic. We are too big and strong; anything we do is sure to be wrong. We are determined to have a depression: our imports will fall and England will suffer. Inexplicably, we may prosper: our competitive ability will increase and England will suffer. Our motives are unworthy: we espouse policies that "will tend to perpetuate the present superiority of the United States in relation to other industrial exporters" (p. 474). We won't commit ourselves to cut our tariffs when we fall into depression (p. 473). "The fact that neither the General Agreement nor the Charter outlaws tied loans—a most powerful and discriminating means to promote exports—shows that the United States, well aware of its war promoted superiority, means to retain it" (p. 478). We persistently discriminate against efforts to establish a large-scale economic territory in Europe (p. 477). Small wonder that "the poorer countries begin to suspect that—under the guise of attractive slogans—their relative and absolute inferiority is to be stabilized and their social stability is to be sacrificed . . ." (p. 476).

Much of this is deliberately misleading and much of it is simply untrue. The United Kingdom did not seek to include in the Havana Charter any provision requiring the United States to reduce its tariffs unilaterally in the event of a depression or any provision whatsoever relating to tied loans. It may have escaped Mr. Balogh's attention that the American tariff has been reduced, through trade agreement negotiations and price changes, from a weighted average ad valorem equivalent of 48 per cent in 1930 to one of 15 per cent in 1948. He should, however, be aware that a small minority of American loans is tied, that the 3¾ billion dollar loan to the United Kingdom was not, and that the many billions extended in grants and loans under the Marshall Plan are not. The tied loans are open to criticism, but to complain of them and to ignore the much larger volume of untied loans and grants, of which England has been the principal beneficiary, is to be less than honest in argument. It should be noted, finally, that the allegation of American opposition to the creation of a large-scale economic territory in Europe will come as something of a surprise to the administrators and the foreign representatives of the ECA.

There is one American policy of which Mr. Balogh apparently approves.

He likes the generosity of ERP and looks for more generous treatment by the United States in years to come. But he hopes "that the price paid in renewed political conflict will not be too high and that undue fiscal restrictions on the American administrators of the program will not result in humiliating and harmful dictates of policy leading to strife in Europe and worsened relations with America" (p. 480). A fitting comment appears at the close of the essay by Mr. Mason: "Let us not expect too much from this program in the way of popular approbation abroad. Even if all the European requirements stated in the Paris report were supplied without question by the United States, I doubt whether we should be regarded as a generous big brother. The figure of Lady Bountiful is not an endearing one in literature. And when the position of Lady Bountiful is taken by a country which has half the world's industrial output and enjoys a standard of living unmatched elsewhere, it is too much to except that she shall be voted the most popular member of the class. The one most likely to succeed, perhaps, but not the most popular" (pp. 296-97).

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Major Problems of United States Foreign Policy, 1948-49—A Study Guide. (Washington: The Brookings Institution. Pp. ix, 246. Paper, $1.50; cloth, $3.00.)

In 1946 there was established, as an integral part of the well-known Brookings Institution, an "International Studies Group." This group, composed of some eight or nine members of the Brookings staff, is engaged under the able and experienced direction of Mr. Leo Pasvolsky with the important undertaking of producing an annual document dealing with United States foreign policy. The declared purpose of the document is, first, "to aid in the development of an informed and responsible American public opinion on Foreign Policy" and second, "to contribute toward a more realistic training of the increasing number of American specialists in International Relations." In keeping with this dual purpose the document is aimed primarily at students in colleges and universities, discussion group leaders, public lecturers, editorial writers, commentators, and professional men generally.

The document under review is the second of the annual volumes. Compared with its predecessor, it exhibits a marked improvement in format, style and organization, adds a considerable body of new material and reflects an understandable shift in content and emphasis. At the same time, it retains the identic assumption regarding foreign policy and the same approach to its understanding that were emphatically visible and widely applauded in the initial volume. Although neither the assumption nor approach are altogether new, their explicit formulation is sufficiently unorthodox to give significance to the entire venture. The document is not just another book on foreign policy.

The assumption is the relatively simple one that an understanding of

foreign policy is enhanced by looking at it through the lenses of responsible government officials charged with the duty of making decisions. The approach is called the "problem" method.

Assumption and approach combine to inject into the study of international relations a spirit of sharp realism, admirably calculated to serve as a counter balance to the approach of many extremists who, either unaware of the restraints imposed on policy making or restless in the face of them, advocate "ideal" solutions to concrete problems. Followers of Mr. Wallace and advocates of World Government will not find in this document anything which necessarily refutes their views on foreign policy. What they will find is a different approach, a different "time" orientation and a sharpened area of concentration. The document speaks not to the dilemmas of a distant future, but to the problems of a distraught present.

Among the problems of the present, the Japanese Peace Settlement, Economic Assistance to Latin America and the Veto Problem in the United Nations were considered sufficiently pressing to justify special treatment in what are called "Problem Papers." (The conspicuous absence of Germany is explained by its presence in the preceding volume and by subsequent coverage in monthly supplements which keep the basic documents up to date.) The "Problem Papers" occupy approximately half the volume, the other half being devoted to background material describing "The Present Position of the United States in World Affairs" (approximately 30 pages), a "Review of Major Problems," analyzed both geographically and functionally (approximately 100 pages), and helpful appendices including a description of the complicated mechanism for the conduct of United States foreign relations.

The "problem" approach reaches beyond description, in that specific "issues" are ferreted out, identified and then broken down into alternative courses of action, only one of which, presumably, may be chosen by the harassed policy maker. This approach, which bears some resemblance to the intellectual processes embedded in the well-known military "estimate of the situation," presumably reflects actual practice and in so doing brings instruction in foreign policy down to earth. By way of example, the "Problem of Economic Assistance to Latin America" is broken down into six major issues, each calling for policy decisions to which are added four other issues on which an expression of United States policy would be desirable, even though decisions may be postponed. A typical issue of the former kind concerns steps to be taken to stimulate private investment, one alternative being "to pursue a hands-off policy until the Latin American Governments themselves create a favorable climate for foreign investment," the other being to attempt to negotiate agreements along the lines set forth at Bogota. In the body of the document reasons for choosing each alternative are concisely indicated without, however, any expression of preference.

Perhaps enough has been said to show the nature of the volume under review and the character of the enterprise of which it is an important part.

Great care has been manifested in its preparation including, during the drafting stage, the solicited criticism of many individuals concerned directly or indirectly with foreign policy. Its virtues, and they are virtues of a high order, are that it has tended to supply a spirit of realistic inquiry in a field not altogether noted for rigorous analysis. Furthermore, it may be expected that the work will continue to improve as experience demonstrates the need, which this reviewer, at least, believes to exist, for reaching beyond the present effort to one which not only identifies and fragmentizes issues, but relates them back to a set of carefully analyzed "interests" ("objectives"?) so that value judgments may be made with a clearer understanding of their implications for the national security, world stability, the economic well-being of the people or the desire to encourage democratic tendencies the world over. If it is possible to speak of a weak spot in the present volume, it is believed it can be found in that part of the document (pp. 9-27) in which this is attempted. Lack of rigour is evident, not alone in the verbal confusion caused by the too indiscriminate use of such terms as "aims," "objectives," "responsibilities," "interests," "ideals," "principles," "attitudes" and "forces," but in the failure to show clearly the character and extent of our interests, their relation to general policies and the relation between general policies and specific commitments. It is worth remarking that in the absence of some such frame of reference, value judgments are apt to be obscured and hunch, common sense, or assumed wisdom tend to steal the show.

The document under review, despite the great care which has gone into its preparation, provides this frame of reference only partially by a brief preliminary sketch dealing with the "bases" of United States foreign policy followed by a careful but purely descriptive account of recent developments. This is believed to be insufficient even after allowance is made for the fact that the document attempts to avoid value judgments by refraining from advocating any particular policy or set of policies. Alternatives are stated but not "evaluated." Given the purposes of the publication, this sense of restraint is commendable. It may be indulged, however, while still recognizing that value judgments are implicit in the sifting of "relevant" facts, the identification of issues and the statement of alternatives as Messrs. Gromyko, Vyshinsky and Molotov would readily discover should they chance to study them. What is urged is not that value judgments be made explicit but that the basis for making them be analyzed more thoroughly. Or, to repeat, that a better framework be supplied against which to project the analysis of facts, issues, and alternatives.

It may be objected that this would require another book and thus falls outside the scope of legitimate criticism. By way of answer it is suggested that this is the heart of the business and thus deserves more respectable treatment by a group which in the short space of three years has already demonstrated its high capacity by making a worth-while and distinctive contribution toward creating a more informed opinion on foreign affairs, and a better understanding of the practical dilemmas confronting policy makers.

HARDY C. DILLARD

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Great Britain in the World Economy. By ALFRED EDWARD KAHN. (New York: Columbia University Press. 1946. Pp. xvii, 308. $4.00.)

The value of this study lies partly in the clear and precise account which it gives of the long-run trends which weakened and undermined the British world economic position during the years 1919-1939 and the economic and policy adjustments of that period. It lies partly in the theoretical framework within which these events are discussed.

Mr. Kahn is in search of an "organic theory of international equilibrium" which will prove more helpful and enlightening for the study of the basic changes in the world economy now taking place than the "accepted" theory. The only fruitful analysis of the balance of payments "must," he feels, "be in terms of actual cyclical and secular process, of actual complex patterns of cause and effect in mutual interplay and in continual transition, constantly disrupting and readjusting to a real world." He criticizes "accepted" theory mainly because of its tendency to isolate a single cause of maladjustment and then rest content with showing that equilibrating forces will be set in motion. This neglects the nature of the transition during which the equilibrating forces are operative, the cyclical and secular factors that may make the adjustment difficult or easy, and many other relevant considerations.

For these reasons, Mr. Kahn presents his material as, in part, "a case study" for the development of an organic theory. In developing this approach he defines "equilibrium" in a country's balance of payments as "a situation in which over a period of time long enough to exclude seasonal and minor discrepancies the total supply and demand for means of foreign payment are equated, without continuous short-term capital or gold movements in one direction, or sizable fluctuations in the external value of currencies, or default, or measures of control employed to maintain this equality."

Mr. Kahn does not, as sometimes happens, neglect his theoretical approach when dealing with his historical material. He consistently uses the British experience to illustrate the simultaneous operation of the various complex elements leading away from and towards equilibrium that are to be part of the completed organic theory. His emphasis throughout is on the basic long-run trends that have been responsible for weakening the British international economic position and on the economic and policy adaptations to this changed position. He fully recognizes, of course, that the changes in public policy of 1931-32 were a revolutionary readaptation to a changing world situation after the failure of an attempt to rebuild along traditional lines. But he consistently treats the real determinants of British economic policy as independent economic forces, largely beyond the power of British policy to control, and operating continuously over the whole period.

These real determinants are discussed in a general chapter on The Deteriorating Position of British Industry and two chapters on The Decline and Adjustments of the Staple Trades and The Expanding Industries. These chapters are very well balanced. They contain a good deal of cogent criticism of industrial organization and management in Great Britain, particularly of the so-called industrial self-government of the period, but they end on a hopeful note. Mr. Kahn concludes that there was, during these years, a sub-

stantial adjustment to an altered international competitive position in the staple trades, and a successful adaptation of the economy as a whole to the altered international position of British industry.

With this preparation Mr. Kahn analyzes the basic trends in the British balance of payments from 1919-1939 and the adjustments of policy before and after the abandonment of the gold standard. It is in these chapters that the character of the book as a case study towards an organic theory of international equilibrium is most strongly brought out. This gives to a survey of very familiar material an interest and freshness of treatment that will be appreciated by those who have long labored in the field.

The basic problem posed by Mr. Kahn's book is whether or not, in the interwar period, the adjustments in the British economy to an altered international position laid a solid foundation for working out the long-run problems that have persisted into the post-World War II period. In this connection his discussion of the shifting geographical pattern of British exports and imports over the long period 1815-1939 has a special value. In this long perspective he finds that the withdrawal of Britain into a "more closed and regulated regional system, with Britain as the center, attempting to maintain ever closer economic ties with younger, largely primary producing countries of the empire and sterling area" was but an intensification of trends apparent well before 1929 and even 1914. Mr. Kahn, however, reaches a rather firm conclusion that the opportunistic and defensive policies which characterized British foreign trade policy at the end of the inter-war period were being pursued at too great a sacrifice of the advantages of genuine multilateralism. Had not the Second World War intervened, the time would have been ripe for a reversal of policy.

In concluding chapters on The Position of Britain in the Post War World, written during the war itself, and before the Marshall Plan, Mr. Kahn ventures some speculative answers to his basic questions. Since these look beyond the readjustments of the immediate postwar period they have not become out of date. What Mr. Kahn foresees is a period of even greater strain on the British balance of payments than in 1919-39, partly due to the stimulation of competing industrial production rather than primary production by international investment. This can, however, be substantially offset, by a far more effective reconstruction, reorganization and re-equipment of Britain's productive machine for the satisfaction of the demands of the home market than was carried through from 1919-1939. Much will depend on whether or not the sum total of world trade will be increasing so that a diminished share in this trade by the United Kingdom will not entail an absolute decline in British foreign trade.

Mr. Kahn's book contains many interesting discussions of special points such as the long-range shifts in Britain's terms of trade, the changing relations between her capital export and her trade balance, and the changing pattern of triangular settlement between the United Kingdom, the rest of the sterling area, and the rest of the world.

William Adams Brown, Jr.

Brookings Institution

Le Plan Marshall. By FRANÇOIS PERROUX. (Paris: Librarie de Médicis. 1948. Pp. 222. 200 fr.)

Grandeur ou Décadence du Plan Marshall. By J. LÉVY-JACQUEMIN. (Paris: Librairie Marcel Rivière et Cie. 1948. Pp. 75. 120 fr.)

These two French books on the Marshall Plan may be considered remarkable not so much for their content as for what they do not say. In neither of them is any word of the concrete recovery problems facing France or Europe. Of the three aspects of the Marshall Plan—self-help, mutual help and aid from the United States—these books deal only with the last.

If they deal with the Marshall Plan mainly from the familiar point of view of United States aid, however, neither book is without interest for the American economist. Perroux' most interesting essay deals with the responsibilities of an "internationally dominant economy," *i.e.*, the United States. Lévy-Jacquemin offers a new theory of international economics and a concrete proposal to replace the antiquated "equilibrium system." Neither book may be said to deal definitively with the Marshall Plan or disequilibrium in international trade and finance; both are readable and suggestive.

Perroux' five essays, first published over the thirteen months from June 1947 to June 1948, appear to have been designed to reassure worried French readers. The first article, apparently written before both the Harvard speech and the Molotov response to it, defends economic cooperation among neighbors, whatever the attitude of the big powers. The last three set forth an analytical description of the Marshall Plan and its evolution from 19th century private lending via the "neo-liberalism" of the Bretton Woods agreements.

It is in his second essay on the internationally dominant economy, however, that Perroux is at his most paradoxical and suggestive. The Marxist view of economic imperialism, he indicates, is naïve. The theory of imperfect competition has been inadequately applied to international relations, but it is clear that a dominant economy may have a more effective course of action, in the long-run, than short-run exploitation. The intentions of the United States, by inference, may be held to be honorable because the United States, like any other oligopolist, finds it pays in the long run to behave honorably. International economics based upon trade among equal partners is irrelevant to today's problems.

Lévy-Jacquemin is also disposed to jettison a great deal of the classical apparatus, including primarily the major premise of a continuous tendency to equilibrium. In his view, the system operates to perpetuate disequilibrium. Countries should be ranked in a system A, B, C, and D, each tending to have an export surplus *vis-à-vis* countries in the next lower category. At the present time, the United States finds itself in category A; Canada, Argentina, Brazil, etc., in B; Britain, France, Italy in C; and at the end of the scale in D, the backward and underdeveloped countries of the world. The tendency of the United States to perpetual surplus arises from the American propensity to oversave or underconsume combined with our political unwillingness to spend on internal public works.

The measure needed to make this system function, in Lévy-Jacquemin's view, is loans by the United States to backward areas made through the countries of Europe. Offshore purchases under the Marshall Plan are a step in the right direction and a major advance from the tied loans of the Export-Import Bank and Bretton Woods, which are incompatible with multilateralism. After the fruition of the current European investment, however, the next requirement is continuous loans from A to D, so contrived as to let B and C balance their accounts multilaterally.

This thesis cannot of course be taken at its face value. It is asserted rather than argued. And far more important, it neglects the propensity of the United States to import on balance from raw material and tropical areas. Yet it contains flashes of insight, which have a bearing on the rationale behind Point 4 of President Truman's inaugural speech.

In short, both books are worth a perusal.

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Business Administration

Marketing: Principles and Methods. By CHARLES F. PHILLIPS and DELBERT J. DUNCAN. (Chicago: Richard D. Irwin. 1948. Pp. x, 729. $6.00.)

Introduction to Marketing. By PAUL D. CONVERSE and FRED M. JONES. (New York: Prentice-Hall. 1948. Pp. viii, 606. $5.65.)

The basic pattern of textbooks in marketing was established some years ago and has seldom been violated. New books, and revisions of old ones, have been justified chiefly by substitution of current statistics and citations for obsolete ones, but the concepts and topics have remained unchanged. The books under review exhibit minor variations from the pattern, but are unlikely to provide any surprises for marketing instructors. On the other hand, judging from the unsophisticated discovery of marketing facts recently evidenced by anti-marginalist writers in economic journals, those economists who have never read any marketing book might do very well to examine one or both of these.

The Converse and Jones volume is an offshoot from a well-established marketing textbook by Converse. It is deliberately designed as a more popular presentation, and seems aimed at high school students or nonacademic small businessmen. Perhaps the market for such a work commercially justifies its publication. It hardly seems suitable, however, for a course in marketing at the collegiate level. The chief innovation of the book is its emphasis on retailing; 368 of its 588 text pages are devoted to this topic. The approach of this section is on "how to run a store." This undoubtedly has an appeal for thousands of readers, since there are more small businessmen in retailing than in any other economic category. For such readers, this book may be considered better than the usual popular work on retailing, since it does provide some background of general marketing. Moreover, students find retailing easier and more familiar than any other phase of marketing, and the opera-

tional approach appeals to many of them as "practical." The condensation of other standard marketing material, however, means that a student using this text only would be inadequately informed on marketing in general. Nor would he find in this volume any guide to further reading, for there are no bibliographies and the footnote citations are notably sparse.

The Phillips and Duncan volume covers the usual material of marketing in a thoroughly satisfying way. The statistics and references are copious and up-to-the-minute, and the statistics are better organized and digested than is common in marketing books. In its effect on most marketing writers, the inauguration of the Census of Distribution in 1930 was the worst thing that could have happened to development of the study of marketing, for it has resulted in textbooks filled with figures on the number of middlemen of each type, their sales volume, etc. Phillips and Duncan have done better by these data, in pointing up the significance of various Census tabulations. They have, beyond that, been conscientious in seeking for non-census sources to bring their figures up to date in so far as possible. Further evidence of careful preparation is shown by the excellent reading references and the listing, for each chapter, of Harvard cases appropriate for use with the text material.

A differentiating feature of the book is its emphasis on the consumer. Two of the early chapters are devoted to the ultimate consumer's buying motives and problems and most of one chapter to consumer statistics; this is followed, contrary to custom, by a chapter on the industrial user. The preface explains that it is recognized that the customer—whether household consumer or industrial user—is the proper starting point for all marketing plans. But the text material goes beyond the viewpoint of the sales manager and the strategy of exploitation of the consumer. In one chapter, the marketing system is examined from the viewpoint of the consumer, and is found somewhat wanting; there follows a discussion of the "consumer movement" and the business and government aids to the consumer. The authors' interest in the consumer is shown further by a lengthier section on consumer co-operatives than is usual.

While Phillips and Duncan do not go very far in satisfying the current demand for development of marketing theory, their chapters on pricing remain the strongest to be found in marketing texts. The theory of monopolistic competition, which Phillips introduced to marketing texts in his 1938 edition, is briefly but adequately explained. It is followed, however, by the customary series of unrelated and unanalyzed paragraphs on various pricing policies used by manufacturers and merchants. These marketing facts regarding pricing practices stand as a challenge to economists and marketing students alike; perhaps theory in both fields may be improved by more serious consideration of the relation of marketing price policies to economic theory.

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Introduction to Business. By Lewis A. Froman. (Chicago: Richard D. Irwin. 1948. Pp. xxv, 601. $4.25.)

This book is written as a text to be used in a first course in business.

Its usefulness, as is the case with textbooks generally, will depend on such factors as the relation of the course to other courses in the curriculum, the equipment of the students and the reliance placed by the instructor on the textbook.

In many institutions the typical student in a first course in business is a college freshman without business experience who is taking courses in the social sciences simultaneously and who will ultimately have the benefit of a comprehensive curriculum. At the other extreme is the beginning student in the evening division who is likely to be more mature and experienced but who will not be taking any other "general" course at the same time and who may benefit from an introduction to the social sciences as well as an introduction to business.

Dr. Froman's book appears to be planned with the interests of the latter group of students in view. In a section on "The Functions of Business Enterprise" there is a page on the hedonistic concept of choice and a paragraph which distinguishes capitalism, socialism, and communism. Treatments of roundabout production, risk bearing and Utopian socialism are included.

The other sections of the book include one on "The Nature of Business Enterprise" containing chapters on Manufacturing, Extractive, Public Utilities and Trade and Service Industries as well as Financial Enterprises and Agriculture. The section on "Problems of the Business Unit" has chapters on Form, Size, Internal Organization, Management Controls and Employee Relations. The final section is concerned with "The Role of Government" and includes chapters on Monopoly Regulation, Taxation and Government Enterprises.

These matters are presented so that the student always remains at a safe distance from the turmoil, triumphs and anxieties of business operations and the problems confronting society receive greater emphasis than those which consume most of the time of business management. For instance, the discussion of public utilities includes paragraphs on natural monopoly, the importance of coal as a source of energy and defines watergas and coke-oven gas. It gives little idea of the nature of the problems to which the management of a public utility devotes itself and the characteristics which would distinguish a well-run utility from one poorly run.

The chapter on financial enterprises devotes a paragraph to the fact that national banks issued bank notes before 1935 and a page and a half to credit unions. It gives no idea of commercial banking as a business in which some prosper and others fail or the relationship of the business enterprise to its banker. Bonds are treated only from the point of view of the investor and not from the point of view of the borrower.

There are some who believe that a major function of the introductory course in business is to provide an insight into business as a career. Not only the college freshman, but a large proportion of the students in clerical or other routine jobs who attend evening courses have very little idea what an executive of a copper company, a tire manufacturer or a brokerage house really does. Every course might well strive to indicate the problems, the

skills, and the challenges which specific careers in business afford. No textbook can do this job by itself but every introductory text might well assume its share of this responsibility. Dr. Froman is likely to find that his colleagues in the social sciences will supply any deficiencies he might leave if he sacrificed breadth for penetration and inspiration. He cannot assume that similar help is available to supply the demands of the young man or woman seeking guidance toward a career.

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Industrial Organization and Markets; Public Regulation of Business

Small Business: Its Place and Problems. A Research Study of the Committee for Economic Development. By A. D. H. KAPLAN. (New York: McGraw-Hill. 1948. Pp. xiv, 281. $3.25.)

Within the last decade and a half the subject of small business has gradually emerged as a new and recognizable segment of economic inquiry, with its own fields of research and its own niche in the structure of economic theory. This new study, prepared by Dr. Kaplan for the Committee on Economic Development, represents the most comprehensive and inclusive contribution yet made to the small but rapidly growing body of economic literature in the field. Taken in conjunction with Steindl's work on the place of small business in economic theory[1] and Weissman's work on the financial problems of small firms,[2] Dr. Kaplan's well-organized and clearly presented study should provide the reader with an adequate knowledge of most of the theoretical and practical problems in the field, the principal topics of research, the major points of controversy, and the bases for the development of a sound public policy.

Quite properly, Dr. Kaplan begins his work with an analysis of the various standards used in defining small business. He arrives at a composite definition in which the principal elements are "1 million for volume of business, $500,000 for total assets, and 250 employees for personnel," with the type of firm consisting of a "single independent organization directly under the supervision of its owners who are also its managers—whether incorporated or not." Although to some this definition may seem to take in a lot of territory, it falls far short of Thurmond Arnold's highly pertinent definition of small business as any firm which is unable to maintain a lobbyist in Washington.

Dr. Kaplan then summarizes available statistical evidence on the position of small business in the various branches of the economy, on trends in the business population, on discontinuances and failures, on longevity and turnover, and related topics in the general field of business structure.

Moving from structural to functional characteristics, he next examines the highly important subject of the relationship of size to efficiency. Although here again he offers no new primary data, the conclusions which he derives

[1] Joseph Steindl, *Small and Big Business* (Oxford, Basil Blackwell, 1945).

[2] R. L. Weissman, *Small Business and Venture Capital* (New York, Harper, 1945).

from the existent information on unit costs and profits represent an excellent summary of the state of present knowledge. Thus his principal conclusions are: "(1) The differences in efficiency among the small enterprises themselves are more extreme than those between small and large firms. . . . (2) The middle size firms of an industry commonly make a better average showing on costs and earnings than do either the giants or the smallest members. (3) The over-all tendency is for unit costs to diminish as size increases until the big-business category is reached. But the very largest member of an industry does not usually show the lowest cost or the best profit rate on invested capital. In most cases a firm in the middle range makes the best showing, and frequently a small firm leads the industry in this respect."

The remainder of the book is devoted to the three types of corrective action most urgently needed by small business—management assistance, financial aid, and the preservation of competition. In regard to the first, Dr. Kaplan emphasizes the pervasive absence of management guidance for small business, which all too often is compounded by the reluctance of the small enterpriser to learn new methods and techniques. In addition to a needed expansion in private sources of management assistance, as in trade associations, industrial engineering, market-research firms, etc., Dr. Kaplan feels that "the Bureau of Standards should be authorized to serve small-business groups more aggressively with respect to information on technological developments," and that the Department of Commerce should act as a "clearing-house," gathering and disseminating technical information through the various organizations and agencies serving small business.

In regard to financi~l aid, Dr. Kaplan summarizes the various studies which have been made on this problem and comes to the inevitable conclusions that, by and large, small firms are unable to secure funds through the security markets; that even when the small company is able to use this avenue, the costs of flotation are all but prohibitive; that long-term credit, though on the increase, is still far from being generally available to small business; and that direct investment by individuals has tended to dry up, due largely to the high rates of taxation and to the progressive concentration of population in large cities, with the consequent weakening of personal ties and relationships. After surveying the various proposals which have been advanced to meet this problem, including community industrial development organizations, direct government loans, and loan insurance (the last being treated in a rather cursory and uncritical manner),[3] Dr. Kaplan recommends the establishment of a network of capital banks under Federal Reserve Board supervision, with the commercial banks in each Federal Reserve district authorized to subscribe a small percentage of their capital and surplus in a district

[3] Pp. 167-68. For a fuller presentation of a possible loan insurance program, see House Small Business Committee, 79th Cong., 1st sess., *Hearings*, Pt. 2, H.R. 64, *Financial Problems of Small Business*, 1945, pp. 997-1031; Smaller War Plants Corp., *18th Bimonthly Report to Congress, June 1945*, pp. 11-14; and House Agriculture Committee, Special Subcommittee on Cotton, 80th Cong., 1st sess. (Pace Committee), *Hearings*, 1847, pp. 586-87.

capital bank, which initially could grant credit and perhaps eventually purchase the stock of small firms. As a means of greatly expanding its ability to render financial aid, Dr. Kaplan suggests that each capital bank might be "put in a position to place its debentures or rediscount paper with the Federal Reserve Banks at rates low enough to permit a fair return on the expanded employment of its funds."

In his final chapter, "Competition—Means and Ends," Dr. Kaplan describes the effects on small wholesalers and small manufacturers of the forward expansion by large producers into the distribution field; cites the "introductory pricing" and other recently revealed discriminatory practices of the A. & P. as illustrative of those types of activities against which no small distributor can possibly compete; condemns the fair-trade laws and argues that small business in supporting them is actually working against its own best interests; denounces interstate trade barriers and similar legal restrictions to a free market; advocates a reform of the patent laws; and urges labor organizations to be flexible in dealing with small business and not to expect small competitive firms to be able to meet the same terms and conditions as can be granted by large firms enjoying a monopolistic position.

In the opinion of this reviewer, this well-rounded work has only one flaw, which however is a serious one, namely the comparative lack of attention given to the problem of economic concentration, a problem which certainly deserves somewhat more consideration in a discussion of the "place and problems" of small business. This criticism is based on the following observations:

1. In analyzing the position of small business, he relies principally on data relating to the *number of small firms,* rather than the *proportion* of activity or resources accounted for by small business. This use of data on numbers, which incidentally leads to some optimistic inferences concerning the position of small business that would not be supported by data on proportions, is particularly surprising in view of (a) Dr. Kaplan's own recognition of the great weakness of data on numbers, which are tremendously influenced by the turnover in one-man and other tiny establishments (*cf.* pp. 43, 56, 234), and (b) the existence and availability of a large body of statistical information on proportions which could have been used in the analysis.

2. In the one-and-a-third pages which he does devote to the topic, "Industrial Concentration," he fails to cite any of the available data on the level or trend of concentration, as measured on a corporate or company basis, confining his analysis to the "establishment" or plant data of the Census of Manufactures (pp. 38-39). Although most of the material that he does cite, which incidentally is limited to the period 1929-39, indicates a general increase in concentration, about half of this brief discussion is concerned with something which Dr. Kaplan describes as a "hopeful aspect," namely, a slight decline which took place in the relative share accounted for by the largest size group. This decrease, however, was probably due in large part to the decline in general economic activity, or more specifically to

the greater-than-average decreases which probably took place in the most highly concentrated fields—heavy goods, capital equipment, etc.

3. Dr. Kaplan makes a number of assertions which seem to imply that the proper place of small business should, or, at least, will be as an adjunct or "auxiliary," rather than as a competitor, to big business. Thus, "It is more likely that small enterprise will develop as auxiliary to its larger competitors" (p. 52; *cf.* also, pp. 103, 235). In view of the conclusions which he has arrived at concerning the relationship of size to efficiency, such an observation necessarily implies that the dominance of big business and the "auxiliary" status of small business will be the result of non-efficiency factors, *e.g.*, greater economic power, resources, etc. Not only has Dr. Kaplan failed to spell out this logical conclusion of his argument, but he has also failed to exhibit any particular concern over such a state of affairs.

4. Although he recognizes the existence of the postwar merger movement, he quickly dismisses it as a factor of any importance, stating that the "phenomenon has not, however, reached the proportions of the decade following the First World War" (p. 234). This, of course, is a perfectly safe observation since it would be rather difficult for the merger movement to have achieved the same "proportions" in the three years following World War II that it attained in the "decade" following World War I. If Dr. Kaplan had compared the current merger movement to the first three years rather than to the "decade" following World War I, his statement would still have been true, though to a much lesser extent, since the average number of mergers in the period of intense activity immediately following World War I exceeded the number during the comparable three-year period following World War II by only about one-quarter. The real significance of the current movement, which Dr. Kaplan neglects to point out, is that the increase in concentration resulting therefrom is superimposed upon an already extremely high level of concentration which, itself, is, in large part, the product of earlier merger movements.

5. Finally, in discussing what direct remedies are needed to meet this problem of the concentration of economic power, Dr. Kaplan is, for the most part, rather vague, indulging in such broad generalities as a recommendation that the antitrust laws be "recast into a consistent body of legislation" (p. 245), or that the antitrust agencies should "keep the channels of competition open" and "keep a watchful eye on the potential squeeze that integrated big business can apply to smaller independent units" (p. 217). This leaves the reader in the dark as to his attitude on such specific issues as the need for legislation to arrest merger activity, the desirability of implementing an effective dissolution program, the necessity of breaking up financial and corporate inter-relationships that eliminate competition, and other specific measures designed to arrest the growing concentration of economic power and prevent the complete extinction of the subject of this book.

Aside, however, from his treatment of this crucial subject of economic concentration, there can be little doubt that Dr. Kaplan's book represents

the best general work yet written on the subject of small business. It should definitely be included among the supplemental readings in all courses in the fields of industrial organization, public control of business, and business finance.

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Problems in Price Control: Stabilization Subsidies. Pt. I, *Stabilization Subsidies, 1942-46,* by SEYMOUR E. HARRIS, Pt. II, *Wartime Subsidies and Food Price Stabilization,* by PHILIP RITZ. Edited by PETER G. FRANCK. Hist. Reports on War Admin., Office of Price Administration, Gen. Pub. No. 10. (Washington: Supt. Docs. 1948. Pp. xii, 241. 45c.)

The economist who wishes to form a judgment on the effectiveness of wartime stabilization subsidies will not find a completely satisfactory answer in this volume, but if he is willing to read through a good deal of overlapping and somewhat repetitious material, he will acquire a reasonably adequate idea of the various subsidy programs and the reasons for their adoption. The volume, which is one of the general series of Historical Reports on War Administration, would probably have been more readable had it been entirely the work of one author. While Professor Harris deals chiefly with the non-food subsidies and Mr. Ritz with the crucial role of food subsidies in holding down the cost of living, both authors devote considerable space to somewhat similar analyses of the general role of subsidies in the price stabilization program.

On the whole, Part II is considerably more informative than Part I, for its chronological form of presentation results in a systematic account of the evolution of subsidies from the early days of the defense program through the final breakdown of price control in the autumn of 1946. The political as well as the economic factors which led to shifts in policy are brought into the discussion in a highly illuminating manner. Part I, on the other hand, devotes a number of chapters to a classification and description of the various types of subsidies but makes little attempt to trace their history through the later years of the war and the immediate postwar period.

Both authors seem completely agreed that the subsidies which took the form of incentive payments to encourage high-cost marginal production were a decided success. In these cases, it was easy for OPA to demonstrate that the savings to both consumers and the Treasury far exceeded the cost of the subsidy, with the result that this type of subsidy aroused virtually no opposition. Much the same conclusion can be drawn, apparently, with respect to a number of programs in which government agencies absorbed losses in order to protect domestic price ceilings from the impact of various types of uncontrollable cost increases, especially those involving increases in war-risk insurance rates, shipping costs, and foreign sellers' prices. For many commodities, imports represented only a fraction of the total supply,

and the subsidies prevented the higher cost of the imported portion of the supply from forcing a break-through in the domestic price ceiling.

With respect to subsidies which were paid "across-the-board" (*i.e.*, to all dealers at some stage of production or distribution) the case is much less clearcut, although both Professor Harris and Mr. Ritz attempt to show that the savings resulting from such subsidies exceeded the cost. The net effects of programs of this type are far more difficult to analyze, especially when one attempts to take into account the probable indirect effects of averted price increases. As Mr. Ritz points out, the estimates presented by OPA experts in justification of such subsidies failed to draw a clear distinction between net savings to the Treasury and to the general public. Nor was any account taken of the higher tax revenues which would have accrued to the Treasury if prices had been allowed to rise.

Actually, it is doubtful if the case for across-the-board subsidies could ever be fully presented in statistical terms. When the subsidy program was substantially expanded in the spring of 1943, the basic consideration, as both authors suggest (though not, I think, with sufficient emphasis), was the possibility that a serious break in the price line would lead to a succession of wage and price increases which in the end might become uncontrollable. In the absence of subsidies, the price line could not have been held in a number of important cases without discouraging production.

The last word on the subsidy problem will certainly not have been written until a careful study is made under unofficial auspices. While there is no attempt to "white-wash" OPA in the present volume, it is none the less clear that an official history of this kind needs to be supplemented by a study which can consider fully and frankly such matters as interagency conflicts and the influence of changes in top OPA personnel. Such a study would be especially valuable if a comparison could be made with British and Canadian experience.

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The Marketing of Surplus War Property. By JAMES ALLEN COOK. (Washington: Public Affairs Press. 1948. Pp. ix, 211. $3.25.)

This is the first detailed report on the disposition of World War II surpluses to be published.

Of the approximate $27 billion of property declared surplus, by late 1948 probably less than one-tenth remains in inventory. The surplus property disposed of includes industrial plants, aircraft, merchant ships, and capital and consumer goods. Dr. Cook describes the different disposal problems of each group and the difficulties and complexities within each group with two purposes in mind: first, to determine whether the shortcomings of the disposal program were legislative or administrative; and second, to recommend revisions of the law and policies or procedures of the War Assets Administration so that the disposal of the remaining surpluses will be more rapid. Unfortunately, about two years have already elapsed since

the major part of the report was completed in early 1947. It is worth while noting, however, that several of the major recommendations made by the author, both legislative and administrative, have already been put into practice.

Dr. Cook points out that many of the industrial plants to be sold were large in size, or "scrambled," or of no apparent civilian use, or poorly located (for civilian purposes). In view of these obstacles, it is obvious that the disposal rate would not be too rapid. He is, however, optimistic about the future disposal rate, particularly if the Congress enacts a "stand-by" program.

According to Dr. Cook, the Administration in the disposal of industrial plants contributed little in achieving one of many major objectives laid down by Congress, namely, "to discourage monopolistic practices and to strengthen and preserve the competitive position of small business concerns. . . ." He states that the country's 250 largest corporations secured about 70 per cent of all plant disposals (measured in terms of original cost).

The position of the War Assets Administration, illustrated in the case of aluminum plants, was that large competitors had already entered the industry. These entries apparently have not resulted in the infusion of a competitive spirit in the aluminum industry. The Department of Justice recently instituted action in the Federal Court requiring the Aluminum Company of America to divest itself of some of its property since the disposal of war plants had not established competitive conditions in the industry.

In the analysis of this problem, Dr. Cook accepts the Administration's statements, first, that it had no alternative in the disposal of industrial plants since Congressional policy was not specific enough; second, that the Department of Justice had the responsibility of approving the disposal of plants worth $1 million or over; and finally, that the plants were large and could not be broken down. He fails to evaluate the problems and policies with a view toward determining the reality of the problems and the adequacy of the policies.

It seems to the reviewer* that the Administration could have met, at least in part, the Congressional mandate. For example, the Geneva Steel plant was sold to U. S. Steel rather than a new group. Here was an opportunity to add a competitor to an industry. Although I have heard officials of the War Assets Administration point out that there were no other responsible bidders, it seems to me that the Administration could have followed a positive policy by seeking out and assisting new firms.

Dr. Cook is not satisfied with the rate of disposal of consumer and producer goods. Here he has described and examined excuses rather than reasons. The major obstacle, in his opinion, was the priority system. There is no doubt that disposals would have been more rapid without it. (But if procedures delay the achievement of democratic objectives, we do not discard the objectives!) In the opinion of the reviewer the planning of a "pipeline of dis-

* The reviewer was employed by the War Assets Administration during 1944-1947.

posals" could have been developed so that there would have been a continuous, high disposal rate. A second obstacle, according to Dr. Cook, was inadequate sales planning. This, it seems to me, was the more serious obstacle. The reviewer recalls that when sales planning was instituted on a national level a "pipeline of disposals" was developed so that the rate of disposals reached a maximum in mid-1946. Sales declined subsequently not because of the decentralization of sales planning to the regional offices but the inability of regional personnel—consisting chiefly of salesmen—to plan. Incidentally, one office appointed an economist to be in charge of sales and the results were excellent.

A third obstacle to prompt liquidation, the author states, was the multiplicity of Congressional objectives. As evidence, he cites an interview with officials of the Richmond regional office. This is a case of excuse rather than reason. This office had probably the worst inventory records of any. It did not sell property because it did not know what it had to sell.

Dr. Cook not only fails to recognize the importance of correct inventory records but makes contradictory statements about it. He states that "an examination of inventory procedures in regional offices has revealed that inventories have been maintained and used daily" (p. 137) and that "the War Assets Administration has adopted an inventory control system which, by and large, embodies sound working principles" (p. 138). On the other hand, Dr. Cook reports that "the overall inadequacy of property descriptions has contributed one of the most serious obstacles to efficient sales operations" (p. 141).

Another pair of contradictory statements reflects the conflict not only in the minds of the officials of the War Assets Administration, but also in the mind of Dr. Cook, with respect to the primary objective in the disposal of surplus property. On one hand, the author states that the priority system "tended to divert War Assets' selling staffs from their primary objective—prompt liquidation" (p. 66). Yet he says that "liquidation should be the means to an end rather than the end in itself" (p. 77).

This book, in the opinion of the reviewer, fails to bring out in sharp focus the *major* issues of surplus disposal. No penetrating analysis is offered, for example, of the role of the military in handling a civilian job (there is a passing reference on this point on page 127) or the importance of planning on a broad scale. Dr. Cook has made the serious mistake of relying for his information on Congressional hearings and reports, which reflect political partisanship on the part of Congress and include defenses of operations of W.A.A. A second source is W.A.A. statements on policies and procedures. On the basis of the reviewer's observations (and this opinion was prevalent) any relationship between such statements and *actual* policies and procedures was purely coincidental. A third source was interviews with W.A.A. officials. Here, too, there is room for skepticism as to the accuracy of information. Only careful, persistent, and intensive investigation can dig out the facts about any government activity on the scale of that under consideration.

JACOB J. KAUFMAN

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Public Utilities; Transportation; Communications

Electric Power and Government Policy. Factual findings by the Research Staff and the program by the Power Committee of the Twentieth Century Fund. (New York: Twentieth Century Fund. 1948. Pp. xx, 860. $5.00.)

This book is devoted largely to the report of a competent research staff headed by Arthur R. Burns, the director, and Walter E. Caine, associate director. The research staff, each member of which presumably handled particular sections, consisted of Walter H. Beidatsch, Blanche Bernstein, Melvin G. de Chazeau, Hubert F. Havlik, C. Emery Troxel, Patricia Van Deraa, and William Vickrey. The project was designed to give an objective, factual picture of the electric power industry in its relation to government agencies. A preliminary summary of the main findings written by Edward Eyre Hunt was published by the Fund in 1944 under the title of *The Power Industry and the Public Interest.*

The factual content of this book supplements the theoretical and legal approach of recent and excellent public utility books. Interesting and significant information overflows into voluminous footnotes. If the book were nothing more than a handbook of statistics, its value would be considerably diminished by the fact that the material brought down only to 1940 is now outdated. The value of the book, however, springs more from the strong flavor of regulatory experience that permeates the discussion of every controversial problem.

An attempt is made to analyze some ten regulatory problems. The material is presented with caution and qualifications that would befit a study sponsored by a committee including Professor Bonbright, a farm leader, a regulatory lawyer and three power company executives. (The committee: J. Henry Scattergood, chairman, James C. Bonbright, LaRue Brown, Samuel Ferguson, Murray D. Lincoln, and Paul A. Schoellkopf.) Although the conclusions might conceivably represent a common meeting ground of the minds of the staff, they are so cautious and well guarded that it can be doubted whether many of them represent the strong beliefs of even one of the staff members. In short, the qualifications become the essence of the findings and thus it becomes difficult to summarize the contents.

The discussion of the legal framework of regulation is possibly best summed up by the staff's hope that the Supreme Court will now be disposed to give greater weight to commissions' findings of fact. It is worthy to note that this book is not unduly devoted to exorcising "dat old Debbil," *Smyth* v. *Ames.* For this, readers should be profoundly grateful. The study recognizes the importance of earnings-price ratios as one measure of a fair rate of return. The virtual failure of all commissions until recently and the complete failure of academic writers to consider this approach is almost inexplicable. It is a significant commentary on the solidity of this book to point out that a suggestion that commissions establish normal or average standards of costs of service to which utility companies should be held is relegated to a footnote (p. 105).

Presumably the appraisal of local, state and federal regulation did not yield results which could be stated in categorical fashion. On the basis of statistical studies, the staff reported that state-regulated utilities earned larger profits but had better rate records and lower expenses than locally regulated utilities. The report seems to doubt the efficacy of municipal competition or the threat of competition (pp. 243-5), although tables in the appendix seem to indicate otherwise where there is actual competition.

Now that the attempt has been made, it is to be doubted if much can be gained from a statistical comparison of rates or profits in some states with commission regulation as against selected states with local regulation. What is to be proved by lumping together rate or profit figures for California, Connecticut, Massachusetts, Michigan, New Jersey, New York and Wisconsin to determine the results of commission regulation as compared with local regulation, measured by results obtained in Florida, Mississippi, Minnesota and Texas? The substance of regulation is lost in statistics. One can well ask as to what extent results were influenced by peculiar operating conditions or financial histories, by special qualities of management, by public ownership movements, or political conditions. The effectiveness of commissions ebbs and flows; high tide and low water may both be reached within a few years; generalizations must be suspect.

So many reasons for variations are suggested that the report itself concludes that definitive conclusions are impossible. It would seem to have been to better purpose if the writers had gone further into another approach which was tried on a small scale—that of comparing various pairs of states. If the reasons for all variations could have been traced back to their origin, readers might well have more confidence in the conclusions. Such a task, however, was obviously beyond the time resources of the staff. Apparently much of the valuable information in the report was obtained from grass roots sources —interviews with regulatory officials—including among others those of California, Massachusetts, New York and Wisconsin, states generally recognized as being leaders in regulation.

The section on the financial organization of private systems is almost a text in corporation finance in itself. The discussion of problems of security regulation is particularly illuminating since all too often such discussions are confined to the more or less lifeless enumeration of rules and principles. The policy of the Securities and Exchange Commission emerges as one that has continuously evolved as experience accumulated. The treatment does remain, however, a treatment of problems rather than a recommendation of policy. Some objective standards such as the degree of overcapitalization, the proportion of debt, dividend arrearages and security flotations are considered. Commission regulation of security issues seems to have had some slight effect in reducing write-ups and dividend arrearages. The staff report concludes that state regulation of security issues has not necessarily failed but rather has not been tried (p. 275). Here again earnings-price ratios or yields might have been used as a means of evaluation.

The discussion of the problem of market area size may be summarized

with the statement that the report notes that state commissions have exercised little control over territorial markets, while the policies of both Congress and the Securities and Exchange Commission over a wider front lack clarity and consistency as well as detail. The treatment is critical and descriptive, but there are no concrete recommendations of policy.

The study contains carefully qualified conclusions on municipal ownership presented against a thorough-going discussion of the many pitfalls encountered in making valid comparisons. It is pointed out (p. 435) that the major economies of municipal ownership arise from lower capital costs, more conservative valuation of assets and lower operating expenses. It is believed, with some evidence to the contrary, that tax advantages are offset by contributions to municipalities. These conclusions are based upon the many studies of the problem that have appeared in the past rather than upon new investigations. The report might have been strengthened by a thorough, objective analysis of the Ontario Hydro Commission, something that is sadly needed. The study of rural electrification may be summarized by the guarded conclusions of the report that "This survey has indicated little direct federal subsidy to rural cooperatives. . . . It may or may not be desirable to subsidize rural electrification, either for its own sake or, in times of depression, to contribute toward recovery" (p. 479).

The treatment of the subject of municipal ownership fails, along with every other treatment with which the writer is familiar, in that only after long study can even an expert reader evaluate the significance of isolated blocks of statistics treating various aspects of the problem. Why not utilize the device of hypothetical models of private and publicly owned utilities, incurring representative expenses with representative rates applied to similar rate groups? The specific effect of taxes, operating expenses, etc. could be traced down to their final incidence upon rates. The reader would be given quantitative answers to many of his questions without further research while partisans would have a definite starting point from which to begin their wrangling. The assumptions would of necessity have to be made with care but this staff should have the competence to make them.

The study affords us no definitive answer to the major question of public policy towards the giant multiple-purpose projects. The yardstick idea is firmly eschewed, the lack of consistent policy between the projects is decried, and Congress is called upon to lay down at least the major outlines of power policy. But we are left in the dark as to what they should be. It is taken for granted that indirect competition between private and public ownership should and will continue, but no direct attempt is made to grapple with the problems raised by the obviously cumulative growth of public ownership that we find today. The importance of the projects as a means of business cycle control is recognized.

The study concludes with a discussion of the objectives of a national power system, the power committee's report and recommendations and a statistical appendix. The committee's report is even more cautious than the main body of the report. Professor Bonbright, with hard-headed perversity, takes

frequent exception to the conclusions. In one instance dissents are registered by both Bonbright and Samuel Ferguson (in respect to divorcing gas and electric properties). Needless to say, they are not in agreement.

Although the book is notably free from excursions into the fields of high theory, the report and recommendations take notice of the arguments against taxing a decreasing cost industry. The efficacy of tax reductions in the light of ineffective regulation is questioned by Professor Bonbright (p. 746). Few can disagree with the stated objectives of (1) a workable system of regulation and (2) the proper coordination of government and private ownership (p. 748). We may be approaching the former, but the reviewer agrees with the report in that we get about the kind of regulation we deserve (p. 754). To achieve the second objective the report tentatively suggests a type of power organization similar to the British Grid and the Ontario Hydro. Much is to be said for the proposal although it is difficult to see how coordination is to be obtained as long as governmental ownership remains as such a dynamic institution. There is a plea that negotiational rate making be brought out into the public view (p. 759).

There are no unqualified answers to controversial questions. This is probably all to the good. Instead one finds some cautious recommendations and a thoroughgoing discussion of the qualifying factors. It is this wealth of minutia pertaining to the industry and to regulation that makes this book a valuable one to the student or to framers of policy. No one contemplating further research in the field would be justified in neglecting a preliminary reading of this book.

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The Regulation of Railroad Abandonments. By CHARLES R. CHERINGTON. (Cambridge: Harvard Univ. Press. 1948. Pp. x, 277. $4.00.)

In undertaking this study, the author had in mind two objectives. The first was that of a detailed survey of the policies of the Interstate Commerce Commission in respect to the problem of railroad abandonment, over which the Commission was given control in 1920. The second was the development from this experience of any general conclusions which it might offer in respect to techniques of administrative regulation.

Two sections of the book contain excellent discussions of complicated problems dealing respectively, with judicial review and with actual Commission policy in sanctioning or denying abandonments. Of equal quality but of lesser importance are the discussions of the legislative background of the abandonment clause and Commission procedure in handling the cases.

The critique of the Commission policies, and the treatment of the implications which the Commission action offers for administrative regulation in general are much less satisfactory than the descriptive material. The ultimate conclusion—that a Bureau of Coordination and Research should be established within the Commission (and similar bureaus in other regulatory agencies) for purposes of long-range planning and evaluation of the effects

of particular Commission actions in terms of the plans developed—is one with which there can be substantial agreement. And, in a sense, the failure of the Commission to enunciate a clear policy in respect to abandonment may be advanced as justification for such an agency. But I am not at all sure that the actual decisions of the Commission would have been very different had long-range considerations been taken into account, as the author maintains. Professor Cherington is very critical of the particularist approach of the Commission—that is, of the tendency to deal with each case as a separate problem, with an attempt to balance conflicting considerations involved in the particular case—and condemns the Commission for failing to adopt a "planned coherent regulatory strategy." He is likewise critical of the Commission for being unnecessarily restrictive in preventing abandonments which the carriers would like to make. But his criticism of the Commission on these bases is greatly weakened by the failure to advance, or even to indicate by implication, what "planned strategy" would involve, or what general principle the Commission should have followed in regard to abandonment.

The establishment and utilization of such a principle is not an easy task. The old view, one still accepted by many, that any line on which costs are not covered (granted a reasonable basis for allocating costs and revenue to a particular line) should be abandoned has been seriously questioned by the marginal approach to utility operation and pricing. There may be, and probably are, cases in which the losses to the shippers from abandonment will exceed the losses on the line from continued operation; retention of the lines is justified and practicable (under what amounts to a type of recapture policy) in cases in which the road as a whole is earning more than a necessary return. And essentially—without stating the principle in so many words—the Commission has been attempting to weigh these conflicting considerations of carrier and shipper losses. It is doubtful if a more precise statement of principle would be of much assistance; there is no possibility of calculating exactly the loss to the community from abandonment, or, for that matter, the exact loss from operation of the particular branch. The best that can be hoped for is a rough weighing of the two considerations. The fact that a railroad can never be sure in advance whether the Commission will allow a particular abandonment is an inevitable product of the difficult nature of the problem, rather than a product of the Commission's past policy, as the author argues. In general, Professor Cherington has not established a strong case that Commission policies in abandonment cases demonstrate a fundamental weakness in the structure and operation of the Commission.

The section dealing with the causes of abandonment is not entirely adequate. The author's listing of the causes of traffic declines is an improvement over previous attempts, but stops short of a fundamental problem, the answer to which is not always entirely obvious: exactly why, and under what conditions will a traffic decline cause losses and result in abandonment? Further attention is needed to the question of the carriers' own policies in

regard to seeking abandonment. One legal question which might have been raised is that of the relative powers of the Commission and the federal courts in the case of abandonment of bankrupt lines, an issue which arose in the *Salt Lake and Utah* case and is likely to arise in the future in others.

This book represents a worthwhile contribution to the field of study of administrative regulation, one whose usefulness is enhanced by the excellent style of writing. But it is by no means a complete study of the railroad abandonment problem, from the standpoint of economic welfare considerations involved. It should be pointed out that the author's primary interest is in the field of political science, not economics. But there remains the fact that the author has undertaken to criticize the Commission's policies upon the basis of economic criteria without making clear what the latter are.

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Land Economics; Agricultural Economics; Economic Geography

Road to Survival. By WILLIAM VOGT. (New York: William Sloane Associates. 1948. Pp. xvi, 335. $4.00.)

Our Plundered Planet. By FAIRFIELD OSBORN. (Boston: Little Brown. 1948. Pp. xiv, 217. $2.50.)

These two books bring vividly to the attention of hundreds of thousands of readers significant trends and problems regarding the nation's and world's natural resources. The books come on a wave of public interest in conservation and rebuilding of our diminishing resources. In part they have made the wave. Each has been selected by a popular book club.

The tremendously accelerated wartime drain on world resources followed by the dramatic presentation of the economic reconstruction needs of the western European democracies and our own role in providing aid have sharpened our awareness of the resources problem. Man's ultimate dependence on his environment of soil, water, and plant and animal life for his daily living and future well-being is clearly depicted by both Osborn and Vogt. Not since the heyday of Theodore Roosevelt and Gifford Pinchot have these issues been so much in the public eye. Frequently these two books have been referred to as "scare" books. What they point out should not scare us. Rather it should sting us into more vigorous conservation efforts. The authors have performed a public service in focusing public attention on the need for conservation.

Neither Vogt nor Osborn is primarily an economist or, indeed a social scientist of any kind. A prominent ornithologist, Mr. Vogt is now chief of the Conservation Section of the Pan-American Union in which position he has had broad experience in studying population and resources problems in various Latin American countries. Mr. Osborn is president of the New York Zoological Society. Of the two books, Osborn's is the smoother, more balanced, and less likely to arouse violent emotional reactions for or against. Vogt's book is uneven, written at white heat, and full of fight. It contains

sweeping scientific, cultural, ethical, and economic generalizations and predictions, sometimes without satisfactory backing. Fortified with great quantities of notes, observations, and impressions, Vogt has lunged into his subject matter with both arms swinging. An economist or scientist could easily be unfair in appraising this book.

The main propositions of each book are similar. Following Vogt's more extreme presentation, the whole business may be summed up in the equation $c = b: e$. The carrying capacity (c) of a piece of land (or a nation or the world) at any time varies directly with its biotic potential (b) and indirectly with the environmental resistance (e). An improvement in land use such as better crop rotation or the application of needed fertilizer may increase crop yield and hence the biotic potential and carrying capacity. Soil erosion or leaching will increase environmental resistance, reduce the biotic potential, and thus lower carrying capacity. The elements in this relationship change, but for the impending future, Vogt argues, we may expect e to increase, b to decrease, and c to go down and down. Coupled with this, Vogt sees a century and more of increasing population in most countries. The rising population curve will cross the falling carrying capacity curve, leaving mankind to gloom and misery everywhere.

The situation may, however, be rescued by strenuous, intelligent, worldwide action on two fronts. We must conserve and build up our soil and we must stop having so many babies. Both Vogt and Osborn agree upon the need for resources conservation and development. Vogt goes far beyond Osborn in calling for a reduction in population. Vogt would withhold United States aid to Greece and China until those countries take actions to check births. In his opinion, one hundred million Americans would be about right; that is, would be the optimum population for a sustainable ecological balance in nature. One observer interpreted Vogt as saying, "Forty-five million Americans, drop dead!"

The form of the two books is similar. First is a series of chapters developing the background and stating the main propositions. Following are chapters dealing with the resources trends and critical problems in the different continents and countries. The promising as well as the inadequate efforts toward conservation are discussed.

Since the appearance of these books, scientists of many stripes have stepped forth to condemn them. Many soil scientists say that the term "natural balance" is meaningless apart from man's own cultural achievements in soil science, engineering, and economics. They maintain man's efficiency in food production and distribution is probably still accelerating. Enough tillable but at present unused land remains in the tropics and other areas to produce food for an adequate diet, as determined by the United Nations Food and Agriculture Organization, for the whole world by 1960. In addition, the biotic potential of various types of soil may increase greatly as knowledge and practice improve.

Population experts point to the fact that in the more advanced industrial areas net reproduction rates have decreased, in many instances below the

rate required for replacement. Motivations and techniques for limiting the size of families may be expected to become increasingly important. Men do not obey rigid laws of increase like so many fruit flies. World population may increase for another century or so, and then hold steady or even decrease.

Of the two authors, Vogt especially has little use for economists, unless they are Physiocrats. "Purchasing power goes back fundamentally to natural resources—especially the land—and no amount of symbolical juggling can help us to escape that hard fact" (p. 78). For Vogt the source of wealth is land, especially wheat land. Industrialization, notwithstanding the remarkable increase in *per capita* real income that has come in its wake, is presented as a "fallacy."

In another purple passage Vogt writes: "One of the chief causes of our ecological imbalance is our economic thinking. We identify the symbolic dollar with real wealth. . . . We extract oil, iron ore, and fine timber, and canvasbacks, and call it production . . ." (p. 146). He then calls for subordination of the "money evaluation of the exploitative lumberman, farmer, stockman, trapper, and industrialist . . . to a biophysical evaluation." At other points in the book, the free enterprise and profit system is condemned in harshest terms. Economic thinking is presented as the narrowest kind of "quick profits and the devil take the hindmost" doctrine.

Osborn is more temperate. Having in mind the continuing attack of the cattle and sheep interests on the federal forests, parks, and grazing lands in the West, he concludes ". . . the profit motive, if carried to the extreme, has one certain result—the ultimate death of the land" (p. 183). Osborn, however, does not make any blanket condemnation of the free enterprise system.

The important element of truth in Vogt's diatribe is that more economists should take the long view, giving greater weight to future consequences of present actions. The need for living with nature both now and in future generations should enter the value scales of the economist as well as of the farmer, stockman, fisherman, and industrialist. There is, of course, nothing in economic theory to exclude such considerations. Economic theory as such does not require that the future be discounted at any specified rate. That other scientists, and possibly the general public as well, do not realize this points to a shortcoming of the economics profession in the matter of public information which cannot be dodged.

It must be admitted also that there is need for a further working of general economic theory to cover more adequately the field of resources conservation and development. What seems to be required is not a new structure but rather an extension and adaptation of the present structure to give the additional material more relevance. Production theory as taught in most economics courses, for instance, is focused on the business firm, usually a manufacturing firm, which purchases materials and hires labor in order to turn out a product. Economists should give more attention to the national production which would result from better land and water use and sustained yield forestry. Such programs also require an economizing of scarce re-

sources, but in terms of social as well as firm and individual considerations.

Perhaps one reason why conservation policies sometimes appear confused and contradictory and do not have effective public support is the failure so far to relate conservation economics broadly to economic theory. More than this, minerals conservation, land conservation, and water conservation are not related to one another closely enough. The division is especially sharp between the conservation of exhaustible and inexhaustible resources. Perhaps the greatest contribution the economist can now make is to bring these different subjects in out of the rain and put them securely under the one tent of economic theory.

It cannot be denied that these two books do point to fundamental dangers and needs frequently neglected or underestimated. The need for better conservation of natural resources is so widespread and so urgent that an appeal to emotion is desirable. Otherwise, we may be both too little and too late with strong actions for the protection and improvement of our resources base. Professional economists should keep this in mind when they present their criticisms of the case made by such writers as Osborn and Vogt.

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Introduction to Agricultural Prices. By WARREN C. WAITE and HARRY C. TRELOGAN. (Minneapolis: Burgess Publishing Co. 1948. Pp. iii, 227. $4.00.)

This text is primarily concerned with price variations that are important for entrepreneurial decisions in agricultural production and marketing. It is organized by economic concepts rather than by commodities (but 20 index entries can be found under "wheat"). However, the authors undertake no rigorous logical development of theory. Rather, they assemble a selection of practical analytical tools and show the student how to use them for understanding and dealing with marketing problems.

After a review of the nature of money and prices, the book discusses demand, supply, and competitive and monopolistic price determination. There follows an extensive treatment of market organization and structure and price-making processes, of transfer costs and other locational influences, of seasonal variation, and of quality variation. A substantial chapter is included on futures trading, and one on prices of the factors of agricultural production.

Some main statistical techniques are brought together in a later chapter of the book and in appendices. Here, again, a kit of tools is assembled with practical instruction in their use rather than a rigorous mathematical development.

Two things in the book deserve special commendation. One is the extensive use of tabular and graphic materials from actual research studies. Scarcely a page lacks illustration of this type, much of it reflecting considerable work by the authors in adapting materials to the textual analysis. The student

receives both a wide sampling of available source materials and a practical experience in their interpretation and use.

Second is the emphasis upon evaluation rather than mere description. The book concludes with a chapter appraising our wartime experience with price control and another analyzing farm price-support programs, past and proposed. But throughout the book, whether discussing cyclical changes, monopolistic practices, cooperatives, government marketing programs, or futures trading, the authors call the student's attention to consequences for different groups in society, and to over-all social implications. They take time to refute the doctrine that changes in farm income produce seven-fold changes in national income. They risk a reasoned forecast of a short-run downward adjustment of agricultural prices relative to nonagricultural, followed by a secular decline—or at best a stable relationship—over the next quarter century. Regardless of whether one agrees with the author's opinions, this reviewer believes that it is good for students to have issues important for policy brought out for class discussion.

The book fills an important need in the current shortage of analytical, as versus merely descriptive, texts on agricultural marketing. There is merit in its practical approach. The limitations of that approach might be partly offset by adding references to sources of more rigorous development of the analytical concepts used, both economic and statistical.

HERMAN M. SOUTHWORTH

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Labor

Contemporary Unionism in the United States. By CLYDE E. DANKERT. (New York: Prentice-Hall. 1948. Pp. xv, 521. $5.00.)

The above volume is a useful handbook on labor unions. In twenty-seven chapters, the author has discussed every aspect of unionism from its history to its effect on the general welfare. Most of the time his material is limited to describing known facts. Occasionally his observations are not too meaningful. For example, in a footnote we are told that since workers in the Soviet Union supply all capital, they do "not have to worry about their 'share' since presumably, everything goes to them anyway." Do they or do they not have to worry, and why? Does everything go to them, and what is everything? He then draws the conclusion that trade unions of the type to which we are accustomed are not needed. This, of course, means that there are no problems of income allocation in the Soviet Union, and that there are not even any bases for complaints. Actually, capital in the Soviet Union is supplied by the community by not consuming its total income in a period. Has the worker no interest in deciding on the amounts to be consumed and saved? If reports from the Soviet Union can be believed, the Russians need unions like our own very badly. If our type of unions existed, there might be a few more consumption goods available. All the author has really said is that a totalitarian regime has no place for free unions.

The discussion of "voluntarism" leaves out the influence of government policy upon this attitude. Between the 1880's and the early 1930's, government intervention would have meant mostly stronger government action against labor. Nor is the A. F. of L.'s change of view on this point dealt with adequately. This discussion illustrates a serious defect in this volume, the failure to pursue a topic adequately. While it is true the "Federation realizes now that gains that are extremely valuable to labor may be achieved not only through collective bargaining but also by legislation," we ought to be given some explanation for the change in attitude. What is "a rigid adherence to the Gompers philosophy of voluntarism" in politics? Actually, there is slight difference except as to scale of activity between Gompers' and the present policy.

In discussing the government of the A. F. of L., Professor Dankert agrees that "unity in the executive council is not as real today as it was under the regime of Gompers." This may be true, but it may be well to point out also that the A. F. of L. is more united today than it was in Gompers' day. No appreciable socialist faction exists today, as it did from the beginning of the A. F. of L. to the 1920's. The discussion of the attitude of the A. F. of L. toward joining the World Federation of Trade Unions leaves much to be desired, and the impression is given that the objection is primarily based upon the A. F. of L.'s espousal of "free enterprise." But the A. F. of L. has more substantial objections. English unions are also opposed to "free enterprise," and the A. F. of L. maintains cordial relations with them. English unions can, however, adopt any policy they choose, whether it be favored or opposed by the government. The Russians cannot. Why meet with the Russian unions, they cannot act independently.

This volume has many merits, and it is a usable text in courses on trade unionism. Its greatest shortcoming is the failure to carry through in discussion of issues. Many times the points are given for and against a particular view, but the question is not examined beyond the point of stating the issues. It is frequently more desirable to err, especially if the error is suggestive, than to allow a question to remain "up in the air." Consequently, a teacher will have to be ever watchful to supplement the material. Labor problems of various kinds can be illuminated by different types of analysis, but some explanation beyond stating that groups prefer different alternatives is essential if a volume is to be more than a mere handbook.

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Industry-wide Bargaining. By LEO WOLMAN. (Irvington-on-Hudson, N.Y.: The Foundation for Economic Education. 1948. Pp. 63.)

In this pamphlet a member of the National Bureau of Economic Research undertakes to prove that industry-wide bargaining is dangerous. Though the best examples of such bargaining are in coal mining and on the railroads, he is sound in adding industries like steel and automobiles where the contracts are fairly uniform. Regional examples are also given.

The indictment is based on the premises that national unions generally have strong centralized power over both locals and individual members (pp. 18, 52), that national unions are essentially monopolistic (p. 25 ff.), and that their specific goal is uniformity (p. 9) that will remove labor conditions from the field of competition (p. 21). From these premises the author concludes that agreements reached in industry-wide bargaining do stop such competition both within an industry and among industries (p. 22) and even "will amount in time to taking business out of competition" (p. 33).

To this, he adds criticisms of the increased costs (railroads and coal, pp. 36-38), of the general inflexibility of labor costs so that management cannot adjust to changing conditions (p. 38), and of the practice of employers' associations joining with unions "in fixing costs and prices" (p. 42).

Nowhere is there a suggestion of possible advantages from industry-wide bargaining. The balance of the pamphlet cites examples of the above arguments, some distorted labor history, apologies that have been made for union "monopoly," and of course a remedy. This remedy is mainly to apply the antitrust laws rigidly to labor organizations (p. 62), though strengthening of independent ("company") unions is expected to help (pp. 47-48, 61).

In such a study one may separately examine both premises and reasoning, and also extraneous arguments. It may, for instance, be questioned whether national unions *generally* have the power imputed to them. On the other hand, there seems nothing to gain in quibbling over an exact definition of "monopoly" as applied to labor organizations (unless it is used for derogatory effect), though we may ask whether labor monopolies actually "overshadow any private business monopolies" (p. 33).

That industry-wide bargaining does largely remove labor conditions from competition within an industry may be granted. But only where a single union is powerful in related industries is it effective between industries. For the immediate future it appears unlikely that even within either of the great federations there will be enough collusion among unions to achieve this end. No evidence is offered that business will be taken out of competition (even regionally), so one can merely accept or disagree with the statement, not with the absent reasoning.

The added criticisms are also questionable. Has it been only, or even mainly, the labor costs of railroads and coal mining that have caused branch lines to cease operating and coal consumers to switch to other fuels? Accepting a relationship, other items may also be admitted. Though on page 54 the author states that "no satisfactory evidence is at hand" to show that restriction of output is limited to craft unions, he himself adduces none to show that the union rules with "the most costly effects" are these restrictions. Nor is there evidence for his statement on the opposite page that before 1935 unorganized employees prevented these restrictions from being effective. (Surely Mathewson's *Restriction of Output Among Unorganized Workers* has shown the contrary.)

The inflexibility (except upward) of labor costs does indeed merit serious consideration. If the economy cannot or will not be stabilized, management needs to be able to make an adjustment in costs. But it has yet to be shown

why the burden of this adjustment should be placed mainly on labor. The estimate (p. 31) that wages and salaries amount to almost 80 per cent of the national income does not seem born out by government statistics, nor does it seem relevant to the problems of a firm that can adjust only its own labor costs, not those included in the prices it pays for raw materials and capital goods.

No doubt there are many undiscovered and unprosecuted cases of employers (and employers' associations) fixing prices in collusion with unions; no doubt the possibility is ever present. But that it is yet a common practice is dubious.

History is most useful when it is not distorted. In consideration of the way company unions flocked to join the AFL unions prior to 1935 when the NLRB started aiding the latter, should one agree that company unions were a real barrier to other unions (pp. 47-48)? Is it wholly correct to state that since 1914 unions have been immune to the antitrust laws (p. 62)? Should we also agree that the antitrust laws have so far prevented monopolies other than labor (as the author implies on the same page)?

Perhaps the pot has no right to call the kettle black. Perhaps it is irrelevant that business policies in large firms are no more decided democratically by stockholders than union policies are by union members—usually less. Yet a recognition of this source of difficulties in labor relations might help the reader. Unions feel they must be large to take on large employers; then they are too large for small employers. To be fair to both sides, since an effective prohibition of industry-wide bargaining can be achieved only by reducing the size of unions, the employers too must be curtailed. Are we willing to do so?

And is the uniformity of working conditions so intolerable an evil? Classical economics would seem to allow standardization in a stable economy. Under changing conditions such forced standardization would hasten the natural tendency and more quickly slough off sub-marginal producers. Has the growth of uniformly improved conditions unstabilized the coal industry compared with the 'twenties and early 'thirties? Is organized labor more restrictive than the vested interests of business? Do unions affect prices more than the imperfections of competition under oligopoly? In so one-sided a discussion as Wolman's, we are not likely to find an answer.

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Wages. By Maurice Dobb. (London: Nisbet & Co., Ltd. New ed. 1946. Pp. ix, 222. 6 *s*.)

In this revision, the central chapters on "Theories of Wages" and "Wages and Bargaining-Power" have been altered considerably and the other chapters have been brought up to date.

The book is well written, the treatment is balanced, and the conclusions are sensible. The discussion of methods of wage payment is especially clear and acute.

The author's position with respect to wage theory may be characterized as a healthy scepticism of traditional theories without too much to offer in

their place. As a realist, he repeatedly points out that relationships between wages and other economic variables are much more complex than was formerly supposed. Influenced by Keynesian developments, doubts are expressed concerning "the simple notion of some kind of elastic demand-schedule for labour." With respect to wage differentials between occupations, Mr. Dobb finds that actual differences are so much in conflict with the principle of "equality of net advantages" as "to incline one to think that it cannot be an explanation at all of the major differences of wages in our present wage-system."

A "handbook" cannot be criticized for failing to be a learned and complete treatise. This book does accomplish the purposes of the author. Its most noticeable weaknesses are in areas that have received considerable attention in this country during the postwar period, namely, geographical differentials, the influence of unions on wages, the issue of "labor monopoly," the economics of minimum wages, and the question of a "national wages policy." The issue of "labor monopoly," for example, is not even considered although employer monopoly is, and no systematic treatment is given to the influence of unions on wage structures and wage levels or the economic justification for minimum wage legislation.

An adequate theory of wages must stem from an understanding of wage and employment practices in the absence of unions. An analysis of non-union conditions must provide the sound economic support for labor-standards legislation. Mr. Dobb fails to contribute to such understanding and support when he refers repeatedly to "the labour market" (without indicating what kind of a "market" he conceives it to be); and to "the 'normal' competitive wage." Studies of employment practices and wage structures and policies under non-union conditions show such notions to be misleading and unrealistic. The notion of an existing "competitive wage" is certainly chimerical, yet some American economists still seek to define labor monopoly in terms of a "competitive level of wages" and to classify individual wage rates or wage increases as either "competitive" or "monopolistic." Why let facts spoil a beautiful theory?

In the last chapter, the question of "some sort of centrally co-ordinated wage-policy, worked out between the Government and the trade unions at a high level" is discussed briefly but without shedding any new light on the matter. It is to be hoped that experience then available, will permit the author to expand on this subject in the next revision. The extent to which the spread of collective bargaining and the political compulsions in national unions will give our economy an inflationary bias during the next decades is a problem that needs careful analysis. Any solutions that England can develop to the conflict between national policy-making or planning and free trade unionism with autonomous unions should be helpful to us in working through the wage-price difficulties that exist under free collective bargaining in a full employment economy.

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NOTES

NOMINATION OF OFFICERS

The nomination of officers of the AMERICAN ECONOMIC ASSOCIATION for the year 1950 having been completed by the electoral body, the Executive Committee decided that the names of nominees should be made public at once, instead of being kept secret until the ballots were distributed, as heretofore.

The nominations were as follows:

For President: Frank H. Knight

For Vice Presidents: Edward S. Mason, Clair Wilcox, Edwin E. Witte, Aryness Joy Wickens.

For Executive Committee: Vincent W. Bladen, Lester V. Chandler, Robert A. Gordon, William J. Nicholls.

Two vice presidents and two members of the Executive Committee will be chosen by ballot.

OFFICERS OF ALLIED SOCIAL SCIENCE ASSOCIATIONS

The Allied Social Science Associations are being served by the following officers during the present year:

American Accounting Association: R. L. Dixon, University of Michigan, Ann Arbor, Michigan, president; Clete Chizek, University of Chicago, Chicago 37, Illinois, secretary-treasurer.

American Association of University Teachers in Insurance: J. Anderson Fitzgerald, College of Business Administration, University of Texas, Austin, Texas, president; J. Edward Hedges, School of Business, Indiana University, Bloomington, Indiana, secretary-treasurer.

American Farm Economic Association: Oris V. Wells, Bureau of Agricultural Economics, Washington 25, D.C., president; L. H. Simerl, 305 Mumford Hall, University of Illinois, Urbana, Illinois, secretary-treasurer.

American Finance Association: Neil H. Jacoby, University of California, Los Angeles, California, president; Edward E. Edwards, Indiana University, School of Business, Bloomington, Indiana, secretary-treasurer.

American Marketing Association: Harvey W. Huegy, University of Illinois, Urbana, Illinois, president; George H. Brown, University of Chicago, Chicago 37, Illinois, secretary.

American Sociological Society; Talcott Parsons, Harvard University, Cambridge, Massachusetts, president; Irene B. Taeuber, University of Maryland, College Park, Maryland, secretary-treasurer.

American Statistical Association; Simon Kuznets, 7301 Mountain Ave., Melrose Park, Philadelphia, Pennsylvania, president; Merrill M. Flood, 1603 K St., N.W., Washington 6, D.C., secretary-treasurer.

Econometric Society: Ragnar Frisch, University of Norway, Oslo, Norway, president; William B. Simpson, University of Chicago, Chicago 37, Illinois, secretary.

Industrial Relations Research Association: Sumner H. Slichter, 229 Littauer Center, Harvard University, Cambridge 38, Massachusetts, president; William H. McPherson, Institute of Labor and Industrial Relations, University of Illinois, Champaign, Illinois, secretary-treasurer.

Institute of Mathematical Statistics: J. Neyman, University of California, president; Paul S. Dwyer, University of Michigan, Ann Arbor, Michigan, secretary-treasurer.

RESEARCH IN ECONOMIC HISTORY

The Committee on Research in Economic History sponsored by the Social Science Research Council, has found an opportunity for the extension of work in its chosen field of the relation of government to American economic development in the explorations being conducted by Professor Carter Goodrich of Columbia University with collaboration from a group of graduate students at that institution. To assist Professor Goodrich in the stimulation of these studies, the Committee has made a grant to him which will permit him to aid financially the young men who are making their investigations under his general direction. The graduate students whom he has selected for inclusion within his group are Carter H. Golembe, Benjamin J. Klebaner, Nathan Miller, and Harvey H. Segal. These men will be designated Resident Fellows in American Economic History at Columbia. Mr. H. Jerome Cranmer of this same group has been given a grant-in-aid.

The Committee has also expressed approval of the efforts being made in an exploration of the area of entrepreneurial history, which has been going forward in 1948-49 at Harvard. To aid this Research Center in Entrepreneurial History, it has voted financial aid for 1949-50 to four young men associated with it: Hugh G. J. Aitken, David S. Landes, Harold C. Passer, and R. Richard Wohl. These men have also been designated Resident Fellows in Economic History.

The Committee has concluded its examination of applications for its National Fellowships in Economic History for the year 1949-50. The following men have been selected: Whitney K. Bates of the University of Wisconsin, Ping-ti Ho of the University of British Columbia (a candidate for the doctor's degree at Columbia University), Douglass C. North of the University of California at Berkeley, Jelle C. Riemersma of the same institution (reappointed now for a second year), Arthur J. R. Smith of Harvard, and Lloyd Ulman of the same institution.

Other grants have been made to Mr. Robert B. Johnson of Virginia Union University, Professors M. A. Adelman and Robert K. Lamb of the Massachusetts Institute of Technology, and Mr. John T. O'Neil of the University of North Carolina.

The chairman of the Committee is Professor Arthur H. Cole, Box 37, Cambridge 38, Massachusetts.

NEW PUBLICATIONS

A series of Bulletins on Soviet Economic Development, edited by Professor Alexander Baykov, is to be published by the Department of Economics and Institutions of the U.S.S.R., University of Birmingham, England. The first series will consist of four Bulletins, to be published during 1949, devoted to the development respectively of: industry, agriculture, finance, internal trade and foreign trade. The Bulletins will be available only to those who subscribe for a series. Subscription for the first series of four Bulletins: £1:0:0 (post-free to any part of the world). Payments should be written to the Department as named above.

A quarterly bulletin, *Current Economic Comment,* which should be of interest to many members of the Association, is being issued by the Bureau of Economic and Business Research at the University of Illinois.

Necrology

Frank A. Fetter, March 21, 1949. A memoir will be published in the September number of this *Review.*

Paul Haensel, February 28, 1949.

Albert H. Mowbray, January 7, 1949.

Kenneth T. Setre, January 23, 1949.

Edward Carroll Sibley, January 6, 1949.

Appointments and Resignations

Clark L. Allen has resigned as associate professor of economics at Duke University to become chairman of the department of economics of Florida State University.

V. Lewis Bassie has been appointed professor of economics and director of the Bureau of Economic and Business Research at the University of Illinois.

A. V. Berger-Voesendorf, formerly of Farouk University, Alexandria, Egypt, is now at Gonzaga University.

Max Bloch has taken a position in the Social Security department of the United Automobile Workers, CIO.

Ed. J. Boling is instructor in statistics, College of Business Administration, University of Tennessee.

Kenneth E. Boulding has been appointed professor of economics at the University of Michigan, effective in the fall term.

Mary Jean Bowman was lecturer in economics during the spring semester at the University of California, Berkeley.

Dorothy S. Brady was appointed professor of economics at the University of Illinois in September, 1948.

Leslie J. Buchan, of Tulane University, has been appointed dean of the School of Business and Public Administration, Washington University.

J. M. Buchanan is associate professor of economics in the College of Business Administration, University of Tennessee.

Reynold Carlson, of Vanderbilt University, will be with the United Nations staff, Santiago, Chile, this summer, as economic consultant.

Paul S. Carter is instructor in accounting in the College of Business Administration, University of Tennessee.

Clyde J. Crobaugh, formerly of Fenn College, is professor of finance in the College of Business Administration, University of Tennessee.

Howard A. Cutler is instructor in economics at the University of Illinois.

Anthony Dawson was acting lecturer in economics at the University of Washington in the spring quarter.

John F. Due has been appointed associate professor of economics at the University of Illinois.

George Filipetti, of the University of Minnesota, has been appointed by the National Management Council of the United States delegate in education to the ninth International Management Congress to be held in Brussels.

Richard W. Fisher has joined the staff of the University of Kansas as instructor in accounting.

James B. Foxworth will join the staff of the department of economics and commerce of the University of Chattanooga as instructor this summer.

Donald A. Gardiner, formerly of the University of Buffalo, is assistant professor of statistics, College of Business Administration, University of Tennessee.

Gilbert L. Gifford, formerly of the University of Washington, is associate professor of transportation, College of Business Administration, University of Tennessee.

Marion H. Gillim, on leave of absence from Mount Holyoke College, is with the Office on Foreign Labor Conditions of the Department of Labor.

Eli Ginzberg, on leave of absence from Columbia University, is serving as director of the New York State Hospital Study.

Everett E. Hagen is professor of economics at the University of Illinois.

James K. Hall, of the University of Washington, has been granted sabbatical leave for the academic year 1949-50 to engage in economic research.

Jean C. Halterman has been appointed instructor in business organization and management in the College of Business Administration, University of Nebraska.

Clifford M. Hardin, professor of economics at Michigan State College, has been appointed director of the college's agricultural experiment station.

Einar Hardin has joined the faculty of the University of Minnesota as instructor in economics.

Victor C. Heck, of Vanderbilt University, has accepted an appointment as professor of economics and chairman of the department of economics and business administration, Mercer University.

Vern G. Hefte, formerly of the University of Iowa, is assistant professor of accounting in the College of Business Administration, University of Tennessee.

Oris C. Herfindahl was appointed instructor in economics at the University of Illinois in September, 1948.

Hans Heymann is lecturer in economics at the University of Illinois.

Abraham Hirsch, formerly of the National Bureau of Economic Research, is now assistant professor of economics at the College of William and Mary.

Malcolm W. Hogg was appointed assistant professor of economics at the University of Illinois in September, 1948.

Harriet D. Hudson was appointed assistant professor of economics at the University of Illinois in September, 1948.

Leonid Hurwicz has returned to his position at Iowa State College after a year's service with the Economic Commission for Europe of the United Nations.

A. L. V. Ingram has been appointed assistant professor of economics at Wofford College, South Carolina.

Allen H. Keally, formerly of the University of Pennsylvania, is associate professor of industrial management, College of Business Administration, University of Tennessee.

Charles C. Killingsworth has been promoted to professor and head of the department of economics at Michigan State College.

E. A. Kincaid has resigned as economist and vice president of the Federal Reserve Bank of Richmond and will devote full time to his work as professor of economics at the University of Virginia.

Carl Kreider, of Goshen College, has been appointed director of the Workshop in Higher Education to be held at the University of Minnesota this summer.

Clarence E. Kuhlman, formerly of the University of Mississippi, is associate professor of transportation, College of Business Administration, University of Tennessee.

Dorothy Lampen has been promoted to the rank of associate professor of economics at Hunter College.

John Lindberg, formerly of the Institute for Advanced Studies at Princeton, served as visiting associate professor of economics at Swarthmore College during the academic year 1948-49.

John Lobb has been named chairman of the department of economics and sociology of Mount Holyoke College.

Donald Love has ben appointed part-time instructor in economics at Lafayette College.

Arthur W. Marget is director of the Finance Division, Office of the Special Representative, Economic Cooperation Administration, in Paris. He was incorrectly reported special financial adviser, U. S. Embassy, Paris in the December number of this journal.

Raymond H. McEvoy was appointed assistant professor of economics at the University of Illinois in September, 1948.

Leon Megginson has been appointed instructor in management, Louisiana State University.

Charlotte F. Muller was lecturer in economics in the spring semester at the University of California, Berkeley.

Edward G. Nelson has ben promoted from associate professor to professor of economics at the University of Kansas.

William H. Nicholls, of Vanderbilt University, will teach during the summer session at the Salzburg, Austria, Seminar in American Studies, sponsored by the Harvard Student Council and the World Student Service Fund.

Ralph P. Norton has resigned as instructor in labor and industrial relations, University of Illinois, to edit the Vermillion County Star newspaper in Danville, Illinois.

Louis W. Nuesse is associate professor of industrial management in the College of Business Administration, University of Tennessee.

John E. Orchard, of the School of Business, Columbia University, has joined the staff of the Economic Cooperation Administration, Paris.

Morton Paglin has been appointed instructor in economics in the College of Commerce, Louisiana State University.

Don Patinkin, formerly associate professor of economics at the University of Illinois, is now lecturer in economics at the Hebrew University in Jerusalem.

Gardner Patterson has been appointed to the directorship of the International Finance Section of the department of economics and social institutions at Princeton University.

Frank C. Pierson is on leave of absence from Swarthmore College to direct research in labor economics at the University of California at Los Angeles.

Charles L. Quittmeyer has resigned from the Connecticut General Life Insurance Co. to become assistant professor of economics and business administration, College of William and Mary.

E. G. Rasmussen, who has been on a General Education Board fellowship at the Harvard School of Business Administration, will resume his work at Vanderbilt University beginning with the summer quarter.

Margaret G. Reid was appointed professor of economics at the University of Illinois in September, 1948.

Ronald Reifler has been appointed instructor in the economics department of Claremont Men's College.

Raymond J. Saulnier has been promoted to the rank of professor of economics at Barnard College.

Willard J. Saunders has been appointed assistant professor of business administration at San Jose State College.

Wilson E. Schmidt has ben appointed instructor in economics at the University of Virginia.

Ned H. Scott has been appointed instructor in accounting at the University of Florida.

Edith G. Severo will act as substitute for Mrs. Janet Sundelson, who has been granted leave of absence from Barnard College for the academic year 1949-50.

Everett R. Shaw is assistant professor of economics at Arizona State College.

Joseph Shister, of Yale University, has been appointed associate professor of industrial relations in the school of Business Administration, University of Buffalo.

Carl S. Shoup, of the School of Business, Columbia University, is directing a study of the Japanese tax system for the United States Army in Japan.

Lewis B. Sims, who was detailed to the Hoover Commission from his position as assistant chief of the Governments Division of the Census Bureau, has now transferred to the Public Health Service.

Edward L. Smith has been promoted to the rank of associate professor of economics at Hunter College.

Douglas B. Smith was appointed instructor in economics at the University of Illinois in September, 1948.

Dallas W. Smythe was appointed professor of economics in the Institute of Communications Research, University of Illinois, in September, 1948.

Thorn K. Snyder has been appointed instructor in economics at Purdue University.

Frank A. Southard, Jr., has resigned as associate director of the Division of Research and Statistics of the Board of Governors of the Federal Reserve System to accept the position of United States executive director of the International Monetary Fund.

Edwin H. Spengler has been promoted from associate professor to professor in economics at Brooklyn College.

David K. Spiegel has been promoted from instructor to assistant professor of economics at Pratt Institute.

Ross Stagnar, formerly of Dartmouth College, has joined the staff of the University of Illinois as professor in labor and industrial relations.

Jack Stieber has resigned as instructor in economics at the University of Minnesota to be assistant director of research for the United Steel Workers' Union in Pittsburgh.

Robert M. Strahl, formerly of the University of Nebraska, is associate professor of marketing, College of Business Administration, University of Tennessee.

Theodore A. Sumberg has accepted an appointment as economist for the new fortnightly magazine, *The Reporter.*

Boris C. Swerling has been promoted to assistant professor of economics at Brown University.

A. G. Taylor, head of the department of political economy, has been elected Chancellor Distinguished Professor by the Board of Visitors of the College of William and Mary.

W. Bayard Taylor, of the University of Wisconsin, has joined the staff of Claremont Men's College as professor of business economics.

C. F. Joseph Tom was appointed instructor in economics at Beloit College in September, 1948.

E. T. Towne retired as dean of the School of Commerce, University of North Dakota, in September, 1948.

Joseph F. Trosper, formerly of Indiana University, is instructor in economics in the College of Business Administration, University of Tennessee.

Charles J. Walsh is serving as consulting economist to the Research Institute of America in addition to teaching in the Graduate School of Fordham University.

Ralph J. Watkins, of the School of Business, Columbia University, is serving as director of the Office of Plans and Programs, National Security Resources Board.

E. T. Weiler was appointed professor of economics at the University of Illinois in September, 1948.

Morris Weisz, formerly with the National Labor Relations Board, is temporarily special assistant to the Commissioner of Labor Statistics, Department of Labor.

Edmund Whittaker, formerly of Indiana University, has joined the faculty of Colorado Agricultural and Mechanical College.

Jack H. Wilcox, formerly of Missouri Valley College, is associate professor of finance, College of Business Administration, University of Tennessee.

Charles W. Williams has resigned as professor of economics at the University of Louisville, Kentucky, to become vice president of the Federal Reserve Bank of Richmond.

H. Lawrence Wilsey has been appointed assistant dean of the College of Commerce and Business Administration, University of Southern California.

Herman J. Wyngarden, professor of economics at Michigan State College, has been appointed dean of the college's School of Business and Public Service.

Theodore O. Yntema has resigned as research director of the Committee for Economic Development. He is now vice president of the Ford Motor Company for Finance.

ALLYN ABBOTT YOUNG

Twenty-seventh President of the American Economic Association, 1925

Allyn A. Young was born at Kenton, Ohio, September 19, 1876. He died in London, March 6, 1929.

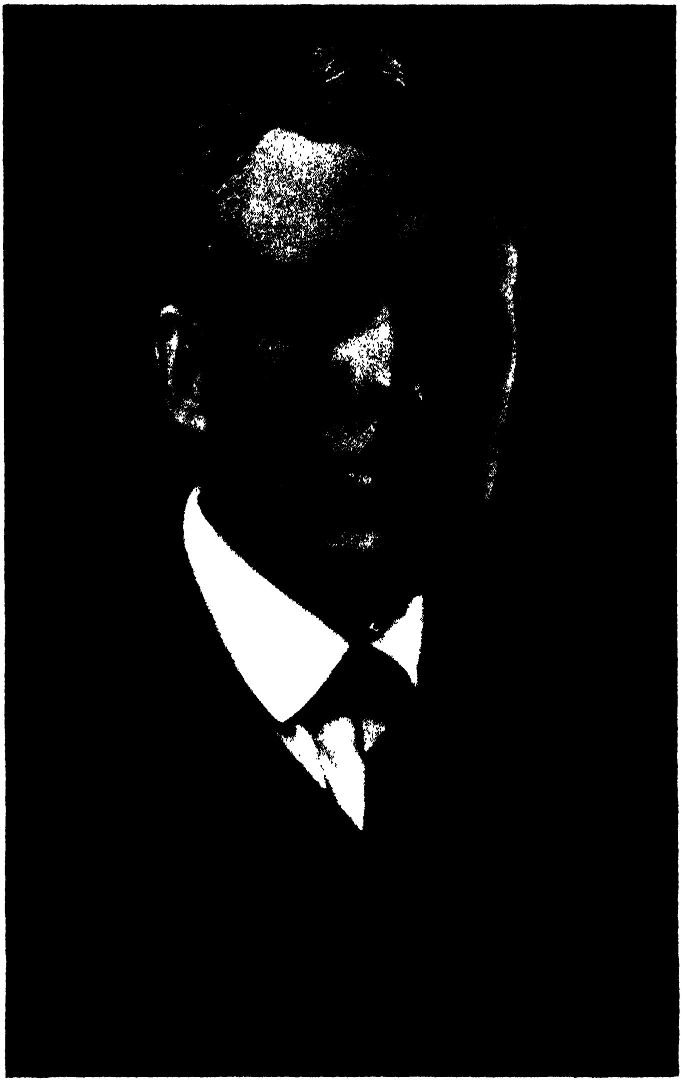
Allyn Young's academic career was remarkably varied. After receiving his Ph.B. degree from Hiram College, Ohio, in 1894 and his Ph.D. from Wisconsin in 1902, he moved consecutively from Western Reserve University, to Dartmouth College, to Leland Stanford (where he was head of the department of economics, 1906-11), to Washington University at St. Louis (professor of economics, 1911-13), to Cornell (professor of economics and finance, 1913-20), thence to Harvard (professor of economics, 1920--), and finally to the University of London (professor of political economy from 1927 until his death in 1929).

While eminently competent as a scholar and teacher in a wide range of economics, he left behind him no large body of publications. He wrote a great many reviews and notes and some elaborate papers, the more notable of which were assembled in a volume entitled, *Economic Problems New and Old*, published in 1927. *An Analysis of Banking Statistics* (1927) was reprinted from the *Review of Economic Statistics.* He was joint author of the 1909, 1916, and 1923 revised editions of Richard T. Ely's *Outlines of Economics.*

After the war he served as a member of the Massachusetts Commission on Pensions. He also assisted Jeremiah Smith in the rehabilitation of Hungary under the auspices of the League of Nations.

A minute, prepared by a committee of the American Economic Association, was published in the June, 1929, issue of the *American Economic Review*, pages 346-348.

Number 27 of a series of photographs of past presidents of the Association.



Allyn A. Young

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NEOCLASSICAL ECONOMICS AND MONETARY PROBLEMS

By PAUL B. SIMPSON*

In his *Price Flexibility and Employment*, Professor Oscar Lange maintains that neoclassical thought is incapable of dealing with problems of money, trade fluctuations, and unemployment because it utilizes a method of partial equilibrium to analyse problems of total effects, and for such problems only a method of general equilibrium is applicable.[1] This paper considers the relation of classical or traditional thought to monetary and employment theories and illustrates the points with brief discussion of the works of some outstanding orthodox economists. The point of view presented is that neoclassical thought in its conception embraces monetary subjects but through an unfortunate association with static systems has become divorced from these important subjects. With this background, Lange's argument will be examined.

I

Neoclassical economics is a body of analysis derived from postulates concerning individual behavior in its efforts to maximize well-being. Individualistic and hedonistic in its approach, as formulated by Adam Smith, it has not been changed in this respect. Keynesian and other systems of thought also appeal to these principles, though scarcely as directly and completely as classical thought. About this there is little disagreement. The question of the relation of traditional thought to monetary economics turns on the interpretation and generality of those individualistic hedonistic behavior principles. If they are con-

* The author is associate professor of economics at the University of Oregon.

[1] *Price Flexibility and Employment* (New York, 1944), p. 1. Professor Lange uses the terms traditional and orthodox economics without specifying the economists so described. Reading of the text indicates that Lange has reference to the English neoclassical and the Lausanne schools primarily.

fined to individual choice under known conditions, that is under conditions of certainty, then the maximizing behavior is of a very constrained sort. If such be the nature of traditional thought, then it must be granted that problems of monetary behavior, trade fluctuations, and the like are outside the area of such thought. For individual choice under certainty is the basis of an economic system of equilibrium where money and trade fluctuations are of little or no importance. If, on the other hand, traditional thought covers the case of individual efforts to maximize welfare under conditions of uncertainty, then there is every reason why it should be germane to the broad problems of monetary economics.

The correspondence of economic systems postulating choice under certainty with equilibrium systems is well understood.[2] If each individual knows his alternatives, then each individual succeeds in maximizing his welfare. No improvement is possible from an individualistic point of view, no individual can be under motivation to regret or alter his decision. Equilibrium exists. If, on the other hand, individuals must decide their actions under uncertainty, then some regrets and changes of plans are sure to occur. Disequilibrium exists, and the time sequence of events will show fluctuations inconsistent with an optimum allocation of resources.[3]

The importance of certainty postulates in the creation of economic systems and the great effect that they have on the nature of a body of thought can be illustrated with a simple example. Assume (1) there is one good a, produced by one factor, labor, l; (2) one unit of

[2] Professor Frank Knight first made this equivalence clear. *Risk Uncertainty and Profit* (Boston, 1921).

[3] Professor Paul A. Samuelson and Professor Ragnar Frisch distinguish statics from dynamics on the basis of the importance of time in determining the evolution of the analytical system. Professor Erik Lindahl and Professor J. R. Hicks have adopted quite similar definitions. It is not hard to see that uncertainty is the basic element giving rise to the essentiality of time in the economic process, since under uncertainty the basic determinants are modified or overpowered by the events of time. The very essence of behavior under uncertainty is that judgments are revised as experience is gained.

It seems to the writer preferable to emphasize the postulatory basis rather than a property of analysis in distinguishing statics and dynamics. There is danger of defining a system that has little meaning economically when analytical properties are put in the foreground. Thus the Samuelson system of stability in multiple markets,

$$dp_i/dt = F_i\ (p_1, p_2, -, p_n)\ i = 1, 2, -, n$$

where p_i is the deviation from equilibrium price, has only a very loose economic interpretation since it does not specify what transactions take place. Professor Lange very likely has tripped over the interpretation of this system, which he develops in the appendix of the work cited. Paul A. Samuelson, *Foundations of Economic Analysis* (Harvard University Press, 1947), pp. 311-17. Ragnar Frisch, "On the Notion of Equilibrium and Disequilibrium," *Rev. Econ. Stud.*, Vol. III (Feb., 1936), p. 100. Erik Lindahl, *Studies in the Theory of Money and Capital* (New York, 1939), pp. 31-40. J. R. Hicks, *Value and Capital* (Oxford, 1939), p. 115.

labor makes one unit of *a;* (3) the price of labor is 100 = p_l; (4) each laborer acts as his own entrepreneur; (5) savings are zero; (6) labor supply is a function of real income, say f(a): (7) each laborer knows that he can work for the price 100 and that the price of *a* will be 100. Under such assumptions equilibrium conditions are that the price of labor be 100 and that the supply equal demand of labor, and there is no doubt that equilibrium will be achieved.

If we suppress assumption (7) dealing with foresight, we must replace it with a new specification of behavior under conditions of uncertainty. Out of the infinite possibilities for the form of such postulates we can select in place of (3) and (7) above the following: (3′) the price of labor lowers in a time period by a proportion of the unemployment of the previous period; (7′) production in time t changes by a constant per cent of the indicated profit in time t: (7″) the price of labor in time t is known and the price of *a* in time t-l is expected to remain unchanged throughout t. It follows that if employment is below the equilibrium level, the price of labor falls, the anticipated profits increase, employment increases, and the economy moves toward equilibrium, though it would not reach it in finite time. A possible sequence of events starting from a particular point and using particular constants is shown in the following table.[4]

t	p_l	a
0	100.0	90.0
1	99.0	92.0
2	98.2	93.6
3	97.6	94.9
4	97.0	95.9
∞	95.0	100.0

[4] Mathematically we have the system

$$p_{lt} = p_{lt-1} - k_1 (L - a_{t-1})$$
$$a_t = a_{t-1} + k_2 (p_{at-1} - p_{lt})$$

where L, k_1, k_2 are positive constants. But since savings are zero, the value of production equals the value of income disbursements and the price of labor and of *a* are equal, i.e. $p_{at} = p_{lt}$. Substituting and solving, one obtains

$$p_{lt} = (L - a_o) (1 - k_1k_2)^t/k_2 + p_o + (a_o - L)/k_2$$
$$a_t = L + (a_o - L) (1 - k_1k_2)^t$$

which yield stable solutions if $k_1k_2 < 1$. The solution which yields the table above was obtained by using $k_1 = .1$ and $k_2 = 2$.

It will be observed that this system postulates behavior without a very thorough theory of maximization of welfare. Nor are the monetary properties described. To fill these deficiencies would require more space than would be justified, although a truly classical dynamic system demands that it be done.

By stating the behavior postulates in precise form under conditions of uncertainty, an evolutionary or dynamic picture is achieved which passes beyond equilibrium states and which is much more general in its conception. By complicating the behavioristic assumptions under uncertainty, and also by complicating the structural elements, *i.e.*, the number of commodities, properties of production functions, etc., diverse analytical models can be created.

The key to appraising the relation of traditional thought to monetary economics lies in its position relative to uncertainty. Other issues such as that of general *versus* partial equilibrium are of secondary importance. In so far as traditional thought confines itself to conditions of certainty, it fails to be a monetary system. In so far as it involves behavior under more general circumstances, it is potentially at least a monetary system. It is from this standpoint that it is proposed to consider some instances of economic analysis.

Since traditional thought is so widely represented in economic literature, it is not possible to characterize its treatment in a simple formula. A surprisingly large amount of traditional thought, however, can be represented under three headings, as follows: (1) Classical works proper in which both certainty and uncertainty economics are represented, but in which the relation of the two is never clearly expressed, Adam Smith, T. R. Malthus and Alfred Marshall being outstanding examples; (2) Classical writers who exclude uncertainty elements almost entirely[5]—exemplified by David Ricardo, J. B. Clark, Lionel Robbins,[6] and Frank Knight; (3) Classical writers who attempt to construct uncertainty or dynamic systems on the basis of certainty or static systems—examples, A. C. Pigou, Knut Wicksell, Friederich von Hayek, D. H. Robertson, and J. R. Hicks. We shall discuss briefly one writer from each of these groups, namely, Marshall, Knight, and Hicks.

II

Marshall's *Principles of Economics* makes every effort to be a monetary economics and economics of uncertainty, though it does not

[5] Don Patinkin has taken this attitude toward classical economics in his interesting essays on the subject. "Relative Prices, Say's Law, and the Demand for Money," *Econometrica*, Vol. 16, No. 2 (Apr., 1948), p. 127; "The Indeterminacy of Absolute Prices in Classical Economic Theory," *Econometrica*, Vol. 17, No. 1 (Jan., 1949), p. 1.

Professor Joseph Schumpeter could be included in this list, since Schumpeter uses classical thought to define Normality and as "*a description of an apparatus of response*" (Schumpeter's italics). This dualism raises a good many theoretical issues which cannot be gone into here. *Business Cycles* (New York, 1939), p. 68.

[6] The characterization of economics as the study of allocation of scarce resources among given ends implies static or certainty postulates or else is very vague. Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (London, 1932), pp. 12-15.

achieve such a goal. Certainty or static formulations are avoided; behavioristic postulates are stated. If the result is not a monetary or dynamic system, the reason is that the problem is too large, not that the attempt is not made. Let us note first the behavioristic assumptions which Marshall uses. A tolerably complete listing of such assumptions, omitting the broader and more institutional assumptions, is shown below:

1. With a given income and with a given price situation a consumer spends his income so as to maximize his utility. Marginal utility of a good decreases with the amount purchased, other quantities constant. Anticipated future utilities are discounted at a known rate by each consumer, and allocation made for future consumption in the light of alternatives determined by interest rates and anticipated future prices. (Book III, Chaps. IV and V.)
2. The amount of saving by a consumer is determined mainly by personal and social factors but in general increases with interest rates. (Book IV, Chap. VII.)
3. The amount of work which an individual worker will do is an increasing function of the price of work. (Book IV, Chap. I.)
4. A farmer allocates his expenditure upon land, capital, and labor so as to maximize his estimated returns from his total expenditure. (Book IV, Chap. III.)
5. The numbers of youths educated in particular skills are increasing functions with distributed time lags of the wages in those skills. The numbers of wokers of a particular skill employed in particular firms and industries are similarly functions of wages in the firms and industries. (Book IV, Chap. VI.)
6. The supply of business management is a function of the price of management and of the individual managers' abilities to command confidence in borrowing money. (Book IV, Chap. XII.)
7. For the anticipated prices of sales of a product at a given time in the future, and the anticipated costs of variable factors relevant to that time, each businessman acts to minimize his costs of production and to maximize his expected profit. (For capital goods the cost is interest.) (Book V, Chap. V.)
8. Businessmen's calculations are disturbed by uncertainty. (Book V, Chap. VII.)

Is this set of behavior postulates when fitted out with proper definitional, descriptive, and identity relations an adequate foundation for the erection of an economic system or not? The answer must be no. If one suppresses the uncertainty elements in posulates 5, 6, 7, and replaces them with a postulate that foresight is perfect, one does have a sufficient set of postulates for an equilibrium economy. This, Marshall does not intend. He rebels at the notion of stationary states and static equilibrium, and he frowns on mathematical methods which express such conditions. His emphasis is on the continuity of change; the gap between the time of economic planning and the occurence of events derived from those plans is never forgotten. Moreover, when Marshall is on guard he himself sees that the evolution of events is

not explicable in terms of equilibrium determinants, and that the source of the difficulty is uncertainty. This is evident in the inclusion of uncertainty among the postulates of behavior listed above, and in many passages, for example the following: "We cannot see the future perfectly—the unexpected may happen and the existing tendencies may be modified before they have had time to accomplish what appears now to be their full and complete work" (p. 347).

If we deny that the Marshallian system is an equilibrium system (which we clearly must), and interpret it as a dynamic or uncertainty system, we find it an inadequate work. The only solution to the dynamic problem which Marshall found was to use equilibrium determinants as the motivators of change, as kind of will-o'-the-wisps beckoning the real economy, but always evading grasp. "The demand and supply schedules do not in practice remain unchanged for a long time together—this gives new positions to the center about which the amount and the price tend to oscillate" (p. 364). Equilibrium evidently affects the dynamic process, but just how is not clear. There is no definitive economics of change.

The source (and reflection) of the difficulty is evident in the postulates which have been listed above. The postulates are not adequate for the creation of a disequilibrium system. Postulates 6 and 7, particularly, are vague. An entrepreneur makes plans on the basis of expected prices. But by what process does he determine expected prices? Does he use present prices, past prices, extrapolated trend prices or what? And having determined his expectations, how definitively does he act on those expectations? One possibility particularly was neglected, namely, that an entrepreneur will do nothing temporarily except to wait for more evidence to accumulate about the factors that influence his well-being. How the economic system operates depends on the specific assumptions made.

Postulates 7 and 8 above are not only vague but are formulated so as to be inadequate for the creation of uncertainty systems. Suppose that it is assumed that entrepreneurs follow a particular system of forming expectations about future prices, for example that they expect present prices to persist. If they form these expectations precisely and with conviction, they will be able to calculate the profit realizable from each possible economic activity. They would seize then upon the most profitable and act upon it with thoroughness. They would go completely into or completely out of cash. Economic movements would be violent, especially if different entrepreneurs had similar anticipations. In fact, reactions would be so violent that entrepreneurs would soon cease to hold their anticipations with such certainty. Such precision of expectations does not yield a sensible economic system. Expectations must be in terms of probabilities if there is to be a sensible

hedonistic economics of uncertainty, particularly if money is to be introduced into the system. Marshall's postulates not only do not define behavior precisely, but are formulated in terms that cannot be used satisfactorily for a precise statement.

It is not easy to recognize this lack of precision in Marshall's work, because he has treated the matter of expectations in a general sense with thoroughness. The types of information which may affect expectations and plans are nowhere better described. For example, we are introduced to the speculative builder who weighs every type of evidence regarding the costs and demands for homes before building. The workings of the minds of the grain merchant and the clothmaker are even more fully explored. The consideration of a particular set of possible modes of decision-making is lacking, and this lack is critical.

Since the postulates themselves are inadequate for construction of an uncertainty system, the deductive consequences of any assumed formulation of economic behavior under uncertainty cannot be effectively stated. Even if we read Marshall's description of individual behavior as a theory of speculation, it is not clear what the consequences are. Marshall resorted to approximations to equilibrium, and this is obviously not adequate as a description of the economic process. Speculative behavior does not necessarily lead to equilibrium; we need to know when, how, and in what degree it does lead to equilibrium.

The point to be emphasized is that the problems of creating an uncertainty economics are well presented in Marshall. These are: (1) how to state principles of behavior when individuals attempt to maximize welfare under conditions of uncertainty, (2) how to combine these principles with assumed sets of economic experience of individuals to obtain the implied actions of individuals, (3) how to trace the economic consequences of (1) and (2) in the whole economic system, thus determining the experience of individuals (and hence the data of (2) at a later date). Later writers have tended to seize upon the defects of Marshall's equilibrium system for comment and correction, and have neglected the important questions posed by the work.

In recent times much has, however, been done in developing the uncertainty elements of Marshall's work, though with little stress upon the relation of this work to the Marshallian tradition. For example, the translation of maximization of welfare principles into uncertainty situations through the use of probability notions has been made by various writers. More formalistic statements have been suggested by Professor Gerhard Tinter and Professor J. Marschak.[7] These

[7] Gerhard Tinter, "The Theory of Choice Under Subjective Risk and Uncertainty," *Econometrica*, Vol. 19, Nos. 3 and 4 (July and Oct., 1941), p. 298, and "A Contribution to the Nonstatic Theory of Production," *Studies in Mathematical Economics and Econometrics*

statements are simple extensions of classical statements and are adequate to show, for example, that speculative monetary behavior is an inherent part of rational behavior. If price estimates are probability estimates, then the holding of money has certain advantages readily stated in terms of traditional maximization theory.

Investigations have been made into the implications of economic behavior under uncertainty. For example, Professor Frisch's work on production time lags deals with the effects of investment decision on future economic life and thus deals with the implications of decisions made on the basis of past experience and uncertain knowledge of the future.[8] This study is directly related to the Marshallian notions of long- and short-run costs. The cobweb theorem, the accelerator principle, and studies of inventory cycles also consider the implications of patterns of decision-making under uncertainty.

Many empirical studies develop and consider dynamic patterns of behavior. Reference is to such studies as those of the National Bureau of Economic Research on cash balances, inventories and professional income, and to such as those of Professor J. Tinbergen on factors affecting entrepreneurial decisions of investment. It seems likely that the development of theoretical uncertainty systems will require such empirical grounding, since the number and complexities of plausible *a priori* systems are greater than for equilibrium economics. It is surely possible and perhaps desirable that these researches be better coordinated with a general dynamic or uncertainty system of thought built up along Marshallian lines.

III

Professor Frank Knight was foremost among those who saw the difficulty in Marshall discussed above, namely the looseness of the relation between behavior under uncertainty and equilibrium analysis. *Risk, Uncertainty, and Profit* is largely devoted to the task of making classical thought rigorous.[9] This objective is tackled and achieved in the sense that definitions and assumptions are made precise under the special conditions of certainty. The result is an excellent criticism of

(University of Chicago Press, 1942); J. Marschak, "Money and the Theory of Assets," *Econometrica*, Vol. 6, No. 4 (Oct., 1938), p. 311.

[8] Ragnar Frisch, "Propagation Problems and Impulse Problems in Dynamic Economics," *Economic Essays in Honour of Gustav Cassel* (London, 1933), pp. 171-205.

[9] "We have developed an historic body of theoretical economics which deals with 'tendencies,' *i.e.*, with what would happen under simplified conditions never realized, but always more or less closely approached in practice. But theoretical economics has been much less successful than theoretical physics in making the procedure useful, largely because it has failed to make its nature and limitations explicit and clear." *Op. cit.*, p. 16.

classical thought and the beginning of a new type of institutional economics. From the standpoint of technical economic analysis, the work, however, had the unfortunate tendency of constraining classical thought to ideal and unreal situations.

An outline of the work is sufficient to indicate its nature. We have first a picture of economic life under conditions of certainty, that is, an equilibrium system or, as Knight calls it, a system of perfect competition. We are introduced to the calculations of a boy eating berries, the weighing of costs and returns of the healthy appetite which knows what it wants and how to get it. We follow to the more complicated calculations of Robinson Crusoe, to the pure exchange economy, and finally to the specialized capitalistic economy. We are shown in brilliant exposition that as long as the alternatives open to each individual can be clearly formulated, an economic system based on such foundations makes sense and possesses certain optimum properties for human welfare, however complicated and specialized the rôles of the individual members of that economy may be.

The second part of the work is devoted to a consideration of the effects on such a system of uncertainty. If the calculations of individuals are upset by uncertainty regarding their alternatives, what then? We learn that various changes occur in the structure of organized society. Specialists assume the role of estimating alternatives. The entrepreneur and his staff of hired sharers of the task, come into being. And with the new rôle comes a new economic return, profit (and loss), the reward to "superior" ability in appraising the alternatives of economic choice and activity. The plaçe of economic institutions, the firm, management, captalists, speculators, etc., in the economic task of allocation of economic resources is brilliantly illuminated.

It will be observed that Knight has reversed the Marshallian order of study. Whereas Marshall conceived of behavior first and attempted to deduce the laws of economic life, equilibrium occupying a kind of catalyzing rôle, Knight reverses the approach. He defines equilibrium first, and considers behavior in terms of its relation to equilibrium. This is an excellent device for the purpose of relating the work of economic institutions to the aim of economic life. The contrast of the straight road of economic life with the crooked road can be used to explain the nature of things. It is not, however, a good device for improving the understanding of the economic process itself as distinct from the kind of forces which act on it. The Marshallian task of describing the dynamic process is circumvented. By taking equilibrium as his point of departure, Knight constrains classical thought. Monetary and dynamic problems are excluded. The approach is essentially moralistic and philosophical.

IV

Professor J. R. Hicks in *Value and Capital* has undertaken an extension of equilibrium economics to a monetary system. He uses equilibrium conditions as a basis for a set of dynamic determinants, reinterpreting the formal relationships of equilibrium in a wider significance. He believes that the method of general equilibrium makes possible this expanded use of equilibrium notions.[10] Unfortunately, however, Hicks neglects the behavioristic part of his apparatus. By overlooking the implicit behavioristic assumptions of static analysis, he puts more weight on the formal determinants than they can bear, and the attempt to build a dynamics out of statics fails. There is triumph in this failure, however, since it is done so explicitly that it exposes the impossibility of this approach which has been utilized by many writers, and with ill success.[11]

Although Hicks develops two analytical schemes, a statics and a dynamics, and characterizes the two on the basis of the exclusion or inclusion of time as a basic ingredient of the system, it is uncertainty that more strikingly distinguishes the two. In the statics there is no mention of choice under uncertainty, all individual choices being made among known alternatives. In the dynamics, uncertainty plays a prominent rôle, the theory of interest in particular being based largely on risk concepts.[12] But the difficulties of uncertainty which are seemingly avoided in the statics actually arise there too. Uncertainty is so treacherous a matter that it rears its ugly head in unforeseen places, and it had caused Hicks trouble before he was aware of its existence.

For purposes of the present discussion it will suffice to consider one phase of Hicks' work, the static pure exchange economy. Hicks uses this model himself and it simplifies the discussion. Production under conditions of certainty is not a source of important complications, and can be safely subordinated. We picture, then, an economy composed of a group of consumers each of whom has an initial stock of one or more of n consumer goods. Trade takes place among the consumers under conditions of perfect competition. What are the terms of trade?

[10] "I believe I have had the fortune to come upon a method of analysis which is applicable to a wide variety of economic problems. . . . The method of General Equilibrium, which these writers (Walras, Pareto, and Wicksell) elaborated, was specially designed to exhibit the economic system as a whole. Our own work is bound to be in their tradition." *Op. cit.*, pp. 1, 2.

[11] Paul A. Samuelson has pointed out such difficulties in Hicks' methods. *Op. cit.*, pp. 269-75.

[12] But not exclusively so. A careful reading of Chapters XVII, XVIII, XXIII, and XXIV shows that time preference and productivity of indirect processes are essential parts of the interest determination. Hicks treats these determinants through the device of the effect of interest rate changes on behavior and not conversely, thus very largely concealing their existence.

Hicks defines equilibrium conditions of trade in a thoroughly traditional manner. We have one good chosen for a numéraire and we assume a preference function for each consumer. Equilibrium is determined where (1) the ratio of marginal substitutability of each two goods equals the ratio of prices for each consumer, (2) each individual's budget is in balance, (3) total sales equal total purchases of each commodity. The definition of Walrasian equilibrium by the fulfillment of these simultaneous conditions is conventional and requires no comment here.

Hicks defines stability of equilibrium in terms of excess supply when non-equilibrium prices are considered.[13] To consider the stability of a market for one commodity *a*, we consider the price of *a* to be out of equilibrium, say, for convenience, above the equilibrium level. For the other n-l prices we consider n-l possibilities where any m prices are at new "auxiliary" equilibrium levels preserving equality of demand and supply for them, and the remaining n-l-m prices are at original equilibrium prices. If supply exceeds demand for *a* in each of these situations, the market is said to be perfectly stable. Thus stability is defined essentially by maintaining conditions (1) and (2) of equilibrium and asking what happens to equation (3) when non-equilibrium prices are considered. The sign of the difference of supply and demand is taken to define stability. Too high a price must create excess supply if the market is to be stable.

With one exception to be noted presently, this is a harmless logical exercise provided it is understood that it is not an economic argument and that nothing is being said about the operations of markets. The problem of how markets behave in disequilibrium cannot be discussed within bounds of assumptions of trade under conditions of certainty. No trade will occur at disequilibrium prices under such conditions. If we maintain conditions (1) and (2) of the equilibrium conditions, condition (3) must be maintained also, since some individual acts contrary to his best interest (assumed in [1]) if supplies and demands are not equal. We thus have a contradiction. To put the argument another way, if trade takes place at non-equilibrium prices, somebody has cause to regret that he allowed these prices to be maintained. Who those persons are that have such regrets, and what commodities are involved are matters that cannot be discussed within the framework of choice among known alternatives. To discuss disequilibrium markets new assumptions involving speculative and uncertainty behavior are necessary. The old Marshallian dilemma has not been solved.

In one case even the formal properties of the Hicksian stability analysis break down. This is the case of perfect stability. If n-l prices

[13] *Op. cit.*, p. 67 and p. 315.

are at "auxiliary" equilibrium levels, maintaining equality of supply and demand in those markets, the nth price must be an equilibrium price too. There is no meaning to perfect stability as Hicks defines it.[14] If all individual budgets balance at a given set of prices and n-1 markets are in equilibrium, the nth market must also be in equilibrium.

The truth is that the Hicksian devices are essentially ones of comparative statics and not of stability. The Slutsky equation interpretation of consumer behavior analyses the change in individual purchases of goods when prices of goods change. But the significance of a price change in a general equilibrium system can only lie in a change of tastes or some other parameter of the system; it has no disequilibrium significance. A price change to a whole system has reflected, but not original, properties. Thus the Slutsky equation and other Hicksian devices for discussing "stability" and "laws of markets" are essentially methods of comparative statics. It is here that the true path of Hicks' analysis lies. The shift in point of view from partial to general equilibrium is important to problems of comparative statics, but it does not meet the problems of uncertainty, dynamics, and monetary events.[15]

[14] Hicks' error lies in deriving market supply and demand functions from individual supply and demands derived in turn from equilibrium conditions of individual traders and then considering these aggregate equations independently under nonequilibrium conditions, which he is not entitled to do. The equations still define equilibrium.

We have given consumer preference functions for P people say $\Phi_j(x_i)$, $j = 1, 2, —, P$; $i = 1, 2, —, n$, and P sets of initial stocks of goods say x_{ij}. Let $p_2, p_3, — p_n$ represent prices which put the corresponding markets in equilibrium. Letting Δ_{ij} denote the quantity which each individual buys (or sells if negative), we have under the hypothesis of perfect stability.

$$\sum_{j=1}^{P} p_i \Delta_{ij} = 0 \quad i = 2, 3, \cdots, n$$

Let p_1 be any price whatsoever for the good 1. Since each individual balances his budget

$$\sum_{j=1}^{P} \sum_{i=1}^{n} p_i \Delta_{ij} = 0$$

Aggregating and combining, one obtains

$$\sum_{j=1}^{P} \sum_{i=1}^{n} p_i \Delta_{ij} - \sum_{i=2}^{n} \sum_{j=1}^{P} p_i \Delta_{ij} = 0$$

or

$$\sum_{j=1}^{P} p_1 \Delta_{1j} = 0$$

Thus p_1 must be an equilibrium price also. If individual budgets balance there can be no set of prices such that only one of them is out of equilibrium. But perfect stability is defined in terms of one price being out of equilibrium.

[15] Hicks' misunderstanding of the nature of his methods results in another error of importance, namely, the assertion that in a world of substitutary commodities a change in demand will change all prices in the same direction. If trade takes place between A and B, and A has a preference function depending on a parameter *a*, then a change in *a* increasing the demand for one good may raise or lower the equilibrium prices of substitutary commodities. *Cf. Value and Capital*, p. 75 and p. 255.

V

Although the extracts from the history of traditional economics are scarcely sufficient to serve as a basis for generalization about the relation of traditional thought to monetary systems, they do suggest certain conclusions. First, is the obvious one that the behavior postulates are fundamental to the statement of economic theories, and that the manner in which the postulates treat the certainty of choice of alternatives is crucial. The temptation to restrict traditional thought to certainty conditions has hindered its development. On the other hand, it was not so restricted in Marshall and there is no reason to restrict it except for the great intellectual labor required for its extension.

Secondly, we note that when traditional thought is viewed in the manner here advanced, much current economic research of a non-static variety does bear on the problem of extending classical thought.

Thirdly, we venture to suggest that monetary systems are essentially short-cut devices to cut through the complexities of erecting a classical system of uncertainty economics out of maximizing postulates. It was perhaps inevitable that pending the establishment of such a basic system, other systems would be forthcoming to fill the intellectual void created by their absence. Reflection upon the nature of the devices utilized in monetary economics indicates that these systems fit that description very well. The basic device is to postulate human behavior in terms very closely allied to the properties of the system which it is desired to determine. In that way the intellectual problem of passing from postulate to conclusion is much reduced, and the economic system made much more manageable.

A familiar example is the quantity theory of money. Here the postulate defines behavior in terms of the ratio of cash balances to expenditures. A whole complex of problems regarding the determinants of expenditures is avoided. Given such a postulate, conclusions regarding velocity, volume of transactions, and price levels are readily forthcoming. A handy tool of analysis is thus provided.

With Keynes, the postulates are more complex although essentially of the sort under discussion. Marginal efficiency of capital, propensity to consume, and liquidity preference are omnibus postulates, determined by all kinds of economic factors. Once given, however, they lead quickly to determinate results. They act as guide posts amongst the complexities of economic life, and are for that reason very convenient and useful.

Lange has now introduced a monetary device of this kind which is of startling simplicity and generality. Human behavior is described in terms of its propensity to accumulate cash, and this propensity is related directly to problems of unemployment of resources. This de-

vice will now be examined to see how adequate it is for the analysis of monetary and employment problems, and to see what light it sheds on the nature of neoclassical economics.

VI

The excess demand for cash balances is a budgetary identity applicable not to what happens in the economic world, but to the plans of all individuals and firms as of a given time. Confronted with a given situation, each individual will have a plan to get into or out of cash at the expense of getting out of or into commodities and securities. The amount of cash which it is planned to accumulate is defined as the excess demand for cash balances. The "accumulation" may be negative in case the desire is to lower cash balances. This aspect of individuals' plans, the contemplated cash accumulations (or releases), is the key to the analysis of the course of economic events so far as employment problems are concerned. All other aspects can be channeled into a consideration of this one.

Consider an individual, firm or household confronted with a set of prices for goods of all kinds, namely, factors, commodities and securities.[16] The individual will decide to buy or sell each good in given amounts during such a time period. Mathematically, if prices are p_i, $i = 1, 2, \cdots, n$ and if the quantities he plans to buy or sell are s_i, where a positive s_i denotes a sale and a negative s_i denotes a purchase, his surplus of sales is $x = p_1s_1 + \cdots + p_ns_n$. He plans to accumulate a given amount of cash x which is his individual excess demand for cash balances. If his excess demand for cash balances is negative, it means that he finds prevailing prices so attractive that he plans to lower his cash balances over the period.

Since the individual's excess demand for cash balances refers to his plans and not to his actions, there is no difficulty in passing from individual to aggregate excess demand for cash balances of the entire economy. The sum of individual excess demands is the aggregate excess demand for cash balances, which is also the total quantity of money which the whole community would like to accumulate during the coming time period if it could.

Aggregate excess demand for cash balances can also be obtained by adding first by commodities instead of by individuals. For an individual good, each person has a net planned purchase or sale, possibly zero in size. Add all these together and we have excess supply of the good, that is, the excess of planned sales over total planned purchases in the community for that good. Again the excess supply may

[16] Goods include all valuable objects except cash. Commodities are goods other than securities. *Op. cit.*, p. 3.

be negative. If we add the money value of these excess supplies over all goods we obtain once more aggregate excess demand for cash balances.

It will be noted that excess demand for cash balances has both a monetary and real connotation; it is defined in terms either of monetary plans or of real plans. This dualism makes ready discussion of real or monetary developments possible. The excess demand for cash balances is also an aggregate of individual plans, so that transition from micro- to macro-statements is singularly easy. Lange has created a device which can be used to discuss the widest variety of economic problems.

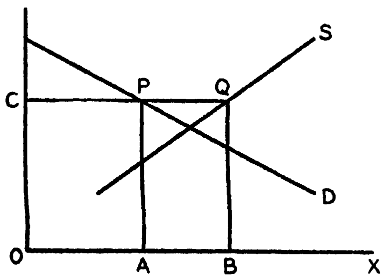

FIGURE 1

Lange identifies unemployment with excess demand for cash balances. This is a central point of his analysis. The excess demand for cash balances represents the desires of the community to obtain additional cash in a time period and also equals the sum of excess supplies of commodities. These excess supplies, the excesses of planned sales, define unemployment. Diagrammatically Lange represents excess supply for a particular good in the economy as the quantity AB = PQ in a supply and demand curve chart as shown in Figure 1. This quantity AB represents the surplus of planned sales at the price OC in the whole economy for the particular good. Total unemployment is obtained by adding the values of these quantities for all goods (ΣOC $\times$ AB). Some of the excess supplies may be negative, but if the summation is positive, there is unemployment, while a negative excess supply represents an inflationary situation.

What determines excess demand for cash balances? To answer this, Lange considers a basic simple economy of perfect competition, static expectations, and absence of international trade, where the determinants of demand for money can be readily stated. Static expectations mean that each member of the economy acts on the basis that present ruling prices will be future ruling prices. The first thing to notice, Lange argues, is that under these conditions, relative prices are of

secondary importance in the problem of unemployment.[17] The level of excess demand for cash balances is not influenced by relative prices except in so far as they operate through the monetary effect. But, though employment is not affected by relative price changes, it may be affected by the price level itself. For as prices fall, the effective total amount of money in the system is likely to increase and this factor does bear on the employment situation.

It thus turns out that in this initial situation the question of employment depends only on the amount of money in the system. Since relative price questions are secondary in importance, attention can be confined to proportional changes in all prices.[18] In the author's words, the operations of a competitive economy of price flexibility will lead to full employment if, and only if, "a proportional fall in all prices in the economy (interest rates being kept constant and bond prices, consequently, being excepted from the general fall) would reduce the excess demand for cash balances to such an extent that substitution of goods for money takes place."[19] This condition, if satisfied, is labelled a positive monetary effect (of a general price change) by Lange. If a price change makes matters worse, the monetary effect is negative, and if it has no effect, the monetary effect is neutral.

Furthermore, Lange says, in the simple basic economy under analysis, the monetary effect is positive. The law of diminishing returns applies to cash balances. The more one has in terms of its buying power, the more one will spend. Consequently, declines in prices (the real quantity of money increasing) encourages greater expenditures, and hence produces a lower excess demand for cash balances, and less unemployment. In this pleasant pastoral scene all goes well. The conclusion of traditional economics that flexible prices will guarantee full employment is correct, even though its argument was false. Little Peter, the positive monetary effect, can do the job.

[17] This is a crucial point and one on which it is difficult to be absolutely sure about Lange's intention. Since Lange introduces relative prices as a part of his original data and since he admits that with a positive monetary effect, relative price adjustments do affect excess demand for cash balances, it may appear that the statement of the text is false. However, it must be noted that the monetary effect is defined in terms of proportional change in all prices and that the effect of relative prices is inoperative *unless* a positive monetary effect is in operation. The dependence of the Lange argument on homogeneous systems and the association of that argument with the Cambridge cash balance theory also support the statement made above. See Lange, *op. cit.*, pp. 16, 17, 99.

[18] Special attention has to be paid to fixed dollar income obligations, notably to bonds. The fixity of their dollar value keeps their prices tied very closely to money. Thus, a change in all prices really means a change in all prices except of bonds. A decline in prices automatically makes bonds more attractive relative to money, since their real purchasing power increases. Thus bonds and commodities fall equally relative to cash if bond prices remain constant and all other prices fall proportionally. *Op. cit.*, p. 15.

[19] *Ibid.*, p. 7.

But now the scene changes. Into the pastoral scene are introduced the wolves of elastic price expectations, imperfect competition, propensity to consume, capital accumulation, technological uncertainty and factor-saving innovations. How will little Peter fare among these wolves? We soon learn. The only question is which wolf will eat him first.

The bearing of these determinants, elastic price expectations, etc., on the excess demand for cash balances is intricate in detail, but easy to see in broad outline. Elasticity of expectations determines how any change in current prices affects expected future prices. Highly elastic expectations would mean that any changes in prices would be interpreted as significant of further changes and lead to a strong movement toward or away from cash, depending on whether the change in price was down or up. Low propensity to consume makes for an accumulation of cash unless a suitably favorable borrowing and lending process develops to fulfill the desire for saving. Uncertainty acts to make the future bleak and all future transactions unfavorable. It thus encourages the holding of cash, since cash less than any other form of wealth commits the holder to future transactions.

Oligopoly is a little different. Its acts by price-fixing agreement and thus thwarts the effects of price flexibility before it can operate. Factor-saving innovations lower the demand for factors, thus increasing the gap between demand and supply for factors. Capital accumulation exhausts the profitable outlets for investment, thus lowering the demand for cash and contributing directly to the excess demand for cash balances. Such are the main elements of the argument. International trade and policy problems are also considered by Lange, but these are not essential parts of the argument.

The problems which Lange's analysis raises fall naturally into two parts, one the question whether excess demand for cash balances suitably defines unemployment, the second the question whether the alleged determinants satisfactorily define excess demand for cash balances.[20]

Consider the first of these. Just why, we may ask, does a gap between demand and supply measure unemployment? It is by no means obvious that such a gap defines unemployment, since that gap applies not to events but to plans of economic units. Without further specification of what happens in a disequilibrium situation as distinguished from what people plan to do, it is impossible to know what disequilibrium involves. The *ex ante* definition tells us that excess supply

[20] These criticisms concern mainly the consistency of the structure and its relation to traditional thought. Broader methodological questions have been raised by Milton Friedman, in this *Review*, Vol. XXXVI, No. 4 (Sept., 1946), pp. 612-31.

exists in terms of a given price situation, but lacking information as to what happens as regards purchases, sales, and prices, how are we to know what unemployment is *ex post?*

We can see why excess supply might be considered as defining unemployment if we consider a labor market in which the supply curve is intersected by the demand curve at a price below the existing price. The unemployment occurs if the actual amount sold is that demanded at the existing price. The excess supply is idle in fact and hence defines unemployment. The buying parts of plans are carried out, the selling parts are not. One can infer that the same applies to other markets than labor and that unemployment is defined by excess supply generally, because the prevailing price is also the ruling price in which the amount sold is determined by demanders' willingness to buy at that price. In other words, it has been implied that we are dealing with cases of administered prices. Competition is of that particular kind where price adjusts more slowly than quantity.[21] Disequilibrium culminates not in price adjustments in the first instance, but in quantity sold disappointments. This is implied by Lange, since a contrary interpretation that price adjusts more quickly and that the quantity sold is that which sellers want to sell would not define unemployment. It is only if sellers keep their goods and buyers keep their money that excess demand for cash balances results in unemployment.

The gap between supply and demand at a disequilibrium price can be used as a definition or measure of unemployment only in terms of a particular market analysis. But this market analysis is not supplied. We are given in fact no description of how excess demand for cash balances is carried into unemployment but left to conclude vaguely that because cash is in demand in time of unemployment, it is a sufficient explanation thereof. It cannot be denied that in the real world, periods of unemployment are periods of desire for cash, but that the relation is causal is by no means clear. By neglecting the market mechanism, Lange leaves us with a very incomplete analysis.

There appears, in fact, to be some contradiction in Lange as regards the market mechanism. In his discussion of imperfect competition, Lange suggests that he was not thinking in terms of administered prices under perfect competition along the lines of the above interpretation. He is careful to distinguish imperfect competition from perfect competition on the grounds that supply always equals demand for monopolies whereas under perfect competition it does not. In other

[21] Whether or not administered prices can fall under the heading of perfect competition is a definitional matter not readily settled. Lange does not define perfect competition and does not face the problem.

words, monopolies meet the fact of excess supply by curtailing sales, in short, by administering its prices. Witness the following:

> The removal of the assumption of perfect competition thus introduces the following modification into the picture developed in the preceding chapters. (1) There is no excess demand or excess supply in monopolistic or monopsonistic markets. Disequilibrium in such markets consists in the monopolists selling or the monopsonists buying a quantity different from that which maximizes their profit.[22]

Under monopoly we are to picture supply differing from demand at a disequilibrium price maintained until entrepreneurs see fit to adjust the price to more profitable levels. But it is exactly this interpretation of perfect competition that allowed us to identify unemployment with excess supply. So far as market processes are concerned, there seems to be no difference between monopoly and competition, though the contrary is alleged.

We come now to the second basic question, whether the alleged determinants, static expectations, and perfect competition satisfactorily define excess demand for cash balances. The fact is that static expectations are not only insufficient to determine excess demand for cash balances, but are inconsistent with it. The same problem arises as arose in Marshall. If individuals really believe that present prices will continue, they will be able to calculate profits for each line of activity. They will then wish to convert completely into cash or (in most situations) completely out of cash, since some profitable ventures will surely exist in any given disequilibrium price structure. Thus excess demand for cash would be zero. A determinate level of excess demand for cash balances is in fact inconsistent with the initial assumption with which it is discussed.

While this is the most striking instance, other lacks of basic analysis of the market process are evident. For example, what is the relation of business income to personal expenditures, and how are dividend payments fitted into a supply and demand statement? Why are not gaps between supply and demand themselves determinants of plans as well as definers of unemployment? Such questions are not answered. There is no adequate set of assumptions regarding economic behavior, and hence no adequate analysis of the economic process. Except for the recognition of the importance of speculative behavior and of money, no progress is evident over Marshall, and there are evidences of retrogression.

If the basic apparatus of Lange's analysis is accepted, then the formal properties of the effects of elastic price expectations, uncertainty,

[22] *Op. cit.*, p. 43.

propensity to consume, etc., on excess demand for cash balances follow in logical fashion in the manner in which Lange has presented them. But, though the logic is correct, some peculiarities about the presentation are worthy of mention. As Lange sees it, curtailment of demand, expansion of supply, and failure of price adjustments to set off the action of the monetary effect will operate to expand excess demand for cash balances. He is thus in a position to emphasize any one of these three factors that he chooses in a kind of *ceteris paribus* arrangement of his own. He is under no obligation to state all possibilities. In some instances he is far from complete. We hear nothing, for example, about how decreased supply can reduce excess demand for cash balances, a result which might well be forthcoming from uncertainty and such influences. The most interesting instance, however, occurs where Lange steps over into the field of classical thought to discuss matters of relative proportions of factors, as he does in connection with innovations and also with capital accumulation. It is interesting to compare the two arguments.

The exhaustion of investment opportunities which Lange feels has occurred in modern economic life can be explained in classical terms. Capital goods are subject to diminishing returns, and every increment to their stock reduces their worth. Witness ". . . an increase in the stock of (some or all) investment goods that is not accompanied by a proportional increase in the supply of primary factors leads to a decline in the marginal physical productivity of the former."[23] This is an argument based on classical theory of proportions of factors. The higher the proportions of capital to factors in the production process, the lower the marginal productivity of capital. This means that interest rates fall since the demand for funds depends on the productivity of capital. In the classical treatment of this point, the argument develops that as the proportion of capital increases, the marginal productivity of labor rises, and wages rise. Lange does not follow the classical argument this far, however; rather he emphasizes that as the demand for capital falls, there is unemployment and a decline in wages. After this the results depend on the nature of the monetary effect.

Lange has another argument based on proportions of factors in connection with factor-saving innovations. An important case is that fewer primary factors (labor) may be required as the result of innovation. In such case the effect of the innovation is to create a relative excess of primary factors, thus throwing people out of work. Unemployment results, hence falling prices, with good or evil resulting depending upon the nature of the monetary effect. The argument is just like the one regarding capital accumulation. Here the factor-saving innovation

[23] *Op. cit.*, p. 67.

creates excess supply of laborers, whereas capital accumulation created a shortage of laborers. It would seem that the factor-saving innovation is just the thing that is needed to prevent the excess proportion of capital. The failure of the "supply of primary factors" which Lange speaks of in the capital accumulation argument seems to find a friend in factor-saving innovations. Lange, however, notes no connection between the two arguments. In one case the accumulation gave rise to an excess of capital which stopped investment and caused unemployment. In the other case, the innovation gives rise to excess labor supply and causes unemployment. Either way the result is bad in this diabolical world.

We conclude that the basic problems unanswered in Marshallian economics have not been answered by Lange. What are the basic determinants of economic behavior, and what are their implications to economic life? On these questions little light is shed. An effort has been made to state behavior in terms of the propensity to accumulate cash, but the manner in which this propensity is related to operations of the economic world has not been made clear.

VII

Lange has asserted (developing a theme of Keynes) that classical economics is inherently incapable of treating problems of trade fluctuations and monetary developments. He purports to develop a theory of these problems adequate to reveal the inherent classical constraint. An examination of Lange's work does not support this claim. An examination of parts of classical doctrine does not reveal such inherent constraint.

In Marshall's work we see an effort to state a general economic theory involving all elements of economic life. Many of the elements of a sound dynamic and monetary economics are included. The trouble is that the description is vague and incomplete at many points. The effort, however, is obviously to see how the economic system works in non-equilibrium situations. There seems to be no obstacle to completing this system except the intellectual labor required.

The seeming divorce of classical and monetary thought can be seen in works where the back is turned on uncertainty, and equilibrium becomes the subject of discussion. In Knight this is done by design. In Hicks it appears to happen unknown to the author. The essential factor preventing these works from dealing adequately with problems of unemployment is the lack of definitive statement of behavior under uncertainty. This rather than partial or general equilibrium questions is the crucial matter.

Lange's work intended as an analysis of the limitations of classical

thought ends as tribute to its usefulness in monetary analysis. Its basic failure is inherited from Marshall, a failure to state the behavioristic assumptions definitely. It is, however, a poorer work than Marshall's in that the essential lacks are covered with analytical superstructure. Classical methods of market analysis are used extensively although with some inconsistency of argument.

No natural barrier between classical and monetary thought exists. On the contrary, the different approaches are supplementary. Classical thought contains and requires monetary notions. Monetary economics requires individual market analysis. The points of departure of the different systems are perhaps different, but there is no reason to believe that when the best monetary system and the best classical system have been written they will differ in subject matter or conclusion.

MARKET STRUCTURE AND MONOPOLY POWER[1]

By ANDREAS G. PAPANDREOU*

I

The increasing tempo of successful prosecutions of violators of our antitrust legislation is once more bringing to our attention the relationship between market or industry types and monopoly power. This may well provide a badly needed opportunity for a general reconsideration, extension and modification of some generally held concepts regarding this relationship, in the light of recent theoretical contributions.[2] Among the problems which call for serious study are those which relate to the unbridged gap between the economic and the legal concepts of monopoly and competition. Pioneer work has already been done in this area,[3] but it does not go beyond the initial stage of breaking the path for further research.

One important reason for this gap between the legal and economic concepts of monopoly is their difference in emphasis. Whereas the lawyer deals with competitive relationships, the economist is primarily interested in the allocation mechanism and welfare economics. To put it in somewhat different terms, the economist is primarily concerned with the power relationships between sellers *and* buyers, and the manner in which these relationships may affect the operation of the allocation mechanism and interfere with the "perfectness" of competition; the lawyer, on the other hand, is primarily concerned with the power relationships between sellers *or* between buyers, and the manner in which these relationships may affect the "freedom" of competition. Both approaches are of course legitimate. We must recognize, in fact, that there are many ways of looking at a firm's power within a given market structure. Despite the fact that all relate to a firm's position (or behavior) in the market, they focus on different aspects of the complex set of relationships between sellers, between buyers, and between sellers and

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[1] The paper is restricted to the study of monopoly power in selling. It should not be difficult to extend the conclusions reached in this paper to the study of monopoly power in buying.

[2] See Joseph Schumpeter, *Capitalism, Socialism and Democracy* (New York, 1942), pp. 81–106.

[3] See E. S. Mason, "Monopoly in Law and Economics," *The Yale Law Journal*, Vol. 47 (1937), pp. 34–39, reprinted in *Readings in the Social Control of Industry* (Philadelphia, 1942), pp. 25–47.

buyers, which are present in every market structure. We may attempt to define and measure a firm's power over the buyers of its products, or over its competitors in selling, or over its competitors in buying, or over the economy as a whole. In all these cases we are dealing with the same set of structural facts, but isolate some particular aspect of the set for definition and measurement.

Professor Abba P. Lerner's[4] definition and measure of monopoly power is typical of the economist's approach to the problem. According to Professor Lerner ". . . the mark of the absence of monopoly is the equality of price or *average* receipts to *marginal* costs. . . ."[5] His approach runs in terms of welfare economics, and his index of monopoly power, Price—Marginal Cost/Price, is most appropriate in the analysis of the effects of monopoly on the allocation of resources. Attempts to use this index of monopoly power in dealing with problems not involving the allocation mechanism have not been particularly successful.[6]

Measures focusing on different aspects of monopoly power have been suggested by economists, but none has been as popular with the profession as the Lerner index. A measure of supernormal profits has been proposed by Professor Bain.[7] It is based on the discrepancy between price and average cost. Such a discrepancy, Professor Bain claims, "is significant because of its influence directly on the functional distribution of income, and indirectly on the propensity to consume, the level of employment, etc."[8] This measure, however, must be used very carefully. It does not pertain to monopoly power *stricto sensu*, but "lumps together the effects of monopoly, monopsony, limit to entry, and . . . also to some extent, the effects of frictional forces in a competitive system, like ignorance and special degrees of uncertainty."[9]

[4] A. P. Lerner, "The Concept of Monopoly and the Measurement of Monopoly Power," *Rev. Econ. Stud.*, Vol. 1 (1934), pp. 157-75.

[5] *Ibid.*, p. 161.

[6] See M. Kalecki, "The Determinants of the Distribution of the National Income," *Econometrica*, Vol. 6 (1938), pp. 97–112; R. H. Whitman, "A Note on the Concept of 'Degree of of Monopoly,' " *Econ. Jour.*, Vol. LI (1941), pp. 261–69, and M. Kalecki, " 'Degree of Monopoly'—A Comment," *Econ. Jour.*, Vol. LII (1942), pp. 121–27. For an attempt to measure changes in the degree of monopoly power, along the lines suggested by Lerner, see J. T. Dunlop, "Price Flexibility and the Degree of Monopoly," *Quart. Jour. Econ.*, Vol. LIII (1939), pp. 522–34, and R. S. Tucker, "The Degree of Monopoly," *Quart. Jour. Econ.*, Vol. LIV (1940), pp. 167–69.

[7] J. S. Bain, "The Profit Rate as a Measure of Monopoly Power," *Quart. Jour. Econ.*, Vol. LV (1941), pp. 271–93.

[8] J. S. Bain, "Measurements of the Degree of Monopoly: a Note," *Economica*, (new series) Vol. 10 (1943), p. 66. The reader should keep in mind that Professor Bain rectifies average cost "to a certain opportunity level," and that his "profit rate" is derived from the "accounting profit rate" by certain estimates as to the market value of capital assets which would be held under competitive conditions.

[9] K. W. Rothchild, "A Further Note on the Degree of Monopoly," *Economica*, (new series) Vol. 10 (1943), p. 69.

Another, and one which is more significant from the point of view of this paper, is the measure suggested by Mr. Rothchild.[10] The degree of monopoly power, according to this author, is equal to the ratio of the slope of the "species" demand curve to the slope of the "genus" demand curve.[11] This measure focuses on the position of the firm vis-à-vis its competitors in the market, and, therefore, comes closer to the concepts of monopoly present in most industry studies, court decisions, and government reports, than either the Bain or the Lerner measures. Recently a most interesting measure, which emphasizes similar aspects of monopoly power, has been proposed by Professor Morgan.[12] The Morgan measure consists of a coefficient of *insulation* of the firm from competition, which is expressed as an increasing function of the firm's relative size, and as a decreasing function of the substitutability of the products of its competitors for the firm's product. This coefficient is clearly directed toward defining and measuring a firm's power vis-à-vis its competitors.

My objective in this paper consists in developing a comprehensive set of concepts dealing with monopoly power in terms of competitive relationships, and further, in associating types of market structure with types of monopoly power. The formulation of these concepts will be carried out in a manner which is intended to narrow the gap between legal and economic concepts. I should like to state emphatically, however, that the concepts developed in this paper in no way displace concepts already in use; rather they are meant to supplement them by shifting the emphasis to an aspect of monopoly power which has not been treated sufficiently by economic theorists.

II

The very nature of the purpose of this paper calls for an unambiguous definition of the concept of industry. Before the advent of the theory of monopolistic or imperfect competition, the concept of a "group" of firms competing in the sale of a "commodity" was considered self-explanatory.[13] The pre-"monopolistic competition" concept of industry

[10] K. W. Rothchild, "The Degree of Monopoly," *Economica*, (new series) Vol. 9 (1942), pp. 21–39.

[11] The "species" and "genus" demand curves are synonymous with Professor Chamberlin's *dd'* and *DD'* curves. *dd'* is the sales curve confronting the firm on the assumption that *all* other prices are given. *DD'* is the sales curve confronting the firm on the assumption that the prices of the firm's competitors are changed in the same or some other systematic way as the firm's in question.

[12] Theodore Morgan, "A Measure of Monopoly in Selling," *Quart. Jour. Econ.*, Vol. LX (1946), pp. 461–63.

[13] This should not be interpreted to mean that economists never took into account the intricacies of the concept. See, for instance, Alfred Marshall's *Principles of Economics* (8th ed., London, 1920), p. 100, n. 1.

referred essentially to a group of firms selling a "physically" identical product. Since the advent in 1933 of the theory of monopolistic competition,[14] however, the concept has been subjected to thorough scrutiny. Both Mrs. Robinson and Professor Chamberlin use the concept of "group" or "industry" with careful qualifications and explicit skepticism. For Mrs. Robinson "an industry is any group of firms producing a single commodity. The correspondence of such an industry to the industries of the real world is not perhaps very close. But in some cases, where a commodity in the real world is bounded on all sides by a marked gap between itself and its closest substitutes, the real-world firms producing this real-world commodity will conform to the definition of an industry sufficiently closely to make the discussion of industries in this technical sense of some interest."[15] For Professor Chamberlin the "group" concept is merely an analytical tool which derives its content from the problem at hand. "Almost any general class of products divides itself into sub-classes. . . . Evidently, a group may be large or small, depending upon the degree of generality given to the classification, but even if it is large, if subgroups exist, this fact cannot be disregarded."[16] Elsewhere, he arrives at the conclusion that "one emerges from any attempt to classify industries . . . with a feeling that it is all exceedingly arbitrary. The 'common sense' definitions of industries in terms of which practical problems are likely to be studied seem to be based much more upon technological criteria than upon the possibility of market substitution."[17]

Kaldor considers the "group" definable only from the point of view of an individual seller.[18] The "industry" of firm i, then, overlaps but is not necessarily identical with the "industry" of a competing firm j, and it becomes conceivable that there may be as many "industries" as there are firms. For Dr. Triffin the industry concept is obsolete for strictly theoretical purposes, although it may be of some use for empirical studies.[19]

The author fully concurs with the general skepticism that envelops the concept of a "group" or "industry." It must be admitted that the concept is not universally useful, and that it may, in fact, hamper theo-

[14] E. H. Chamberlin, *The Theory of Monopolistic Competition* (6th ed., Cambridge, 1948), and Joan Robinson, *The Economics of Imperfect Competition* (London, 1933).

[15] *Ibid.*, p. 17.

[16] Chamberlin, *op. cit.*, pp. 102–03.

[17] *Ibid.*, p. 202, n. 1.

[18] N. Kaldor, "Mrs. Robinson's 'Economics of Imperfect Competition,' " *Economica* (new series), Vol. 1 (1934), pp. 335–41, and "Market Imperfection and Excess Capacity," *Economica* (new series), Vol. 2 (1935), pp. 33–50.

[19] Robert Triffin, *Monopolistic Competition and General Equilibrium Theory* (Cambridge, 1940), p. 88 and elsewhere.

retical formulations of the Walrasian variety. The concept may, however, be useful in theoretical as well as in empirical-statistical studies whose scope is substantially narrower than the whole economy. The grouping of firms for purposes of statistical description or behavior analysis is fully justified, provided that the definition of the "group" is meaningful for the problem at hand and consistent throughout the study or analysis.

The concept of a group of firms selling substitute products is crucial for the purposes of this paper. There remains the question, however, whether we should use the (Kaldor) concept of a *firm-centered* industry or the traditional concept of a *group-centered* industry. The firm-centered industry concept is more elegant. *Industry from the point of view of firm i may be defined to include all firms which compete in selling with firm i.*[20] In this paper, nevertheless, the concept of a group-centered industry will be adopted. Despite its nebulous character, it corresponds more closely to the "industry" of empirical-statistical studies than does the concept of a firm-centered industry.[21] *Our group-centered industry concept is defined to include all the firms which compete in selling with one another.*[22] Two observations are in order in connection with this definition. First, it must be recognized that the boundary of an industry, as it is defined in this paper, is "fuzzy." Some firms within the group may compete with firms outside of the group; they may, in fact, belong to other industries as well as to the industry under consideration. In order to simplify the argument, we will assume in what follows that no industry or market overlapping is present. Removal of this assumption would not destroy any of the results; it would merely make their formulation somewhat more complex. Secondly, an industry, as it is defined in this paper, is much more inclusive than is appropriate for the purposes of most investigators and analysts. As we approach concrete situations we may find it useful to raise the value of the cross-elasticity coefficient which, for our given purposes, makes two firms significantly competitive. This procedure is perfectly legitimate, provided it is meaningful for the situation or problem under study.[23]

[20] Two firms *i* and *j* may be said to compete in selling if the cross-elasticity of demand for the product of firm *i* in terms of the price of the product of firm *j* is greater than zero.

[21] The selection of the group-centered industry concept for use in this paper is due in part to an attempt to maintain a certain measure of comparability between the concepts generally held and the conclusions reached in this paper.

[22] This group must in fact fulfil two conditions: (a) any two firms in the group must compete, and (b) no firm must be left out of the group if it competes with all the firms in it.

[23] For further discussion of the concept of industry see J. S. Bain, *Economics of the Pacific Coast Petroleum Industry* (Berkeley, 1944), Part I, pp. 10–11, and *Pricing, Distribution and Employment* (New York, 1948), pp. 10–60; G. Stigler, *The Theory of Price* (New York, 1946), pp. 280–83; F. Machlup, "Competition, Pliopoly and Profit, Part I," *Economica* (new series), Vol. 9 (1942), pp. 1–23, but especially pp. 5–7.

III

The purpose of the investigator or analyst determines the selection of criteria for the classification of market or industry types, in the same manner that it determines the content of his industry concept. For an analysis of firm behavior the *differentia specifica* of market or industry types is to be found in the character of the competitive relationships among the firms in an industry or market. The widely held classification of industry types in terms of *numbers* and *product-differentiation*[24] is not fully satisfactory from this point of view. It reflects *indirectly* only the character of relationships among the firms comprising the industry. *How large* must the number of firms in an industry be in order that it may fall in the category of a large-number-of-firms industry? The answer is simple, but it does not run in terms of numbers. The number must be so large that firms cannot influence one another's volume of sales by cutting price. Under such conditions firms behave without taking into account the underlying interdependence of their behavior. As Professor Machlup has put it, "the criterion of polypoly is not simply 'large numbers,' but it is, instead, a state of mind and a type of behaviour which is usually associated with large numbers of sellers in a market. . . . Thus, a subjective habit or disposition of certain individuals is the essence of the concept of polypoly."[25] One might add that numbers and product-differentiation necessarily restrict the classification of industry types to the five well-known limiting cases. They lack the flexibility which is necessary in dealing with real-world situations.

Dr. Triffin's concepts of *circularity* and *atomicity* come much closer to the heart of the matter than do the concepts of *small* and *large* numbers.[26] The essence of circular interdependence between two firms is the "boomerang-like" character of their behavior vis-à-vis one another; and the essence of atomistic interdependence between two firms is the absence of this "boomerang-like" character from their behavior vis-à-vis one another. This is clearly a much more effective criterion than numbers for the classification of market or industry types. It does not merely come closer to the heart of the matter; it is also capable of describing complex real-world situations.

Dr. Triffin's definition and use of these concepts, however, is not particularly satisfactory. Not only does he offer two different definitions

[24] F. Machlup, "Monopoly and Competition: A Classification of Market Positions," *Am. Econ. Rev.*, Vol. XXVII (1937), pp. 445–51. For a somewhat different, more extended treatment, see J. S. Bain, "Market Classification in Modern Price Theory," *Quart. Jour. Econ.*, Vol. LVI (1942), pp. 560–74.

[25] F. Machlup, "Competition, Pliopoly and Profit, Part I," *Economica* (new series) Vol. 9 (1942), p. 2.

[26] R. Triffin, *op. cit.*, pp. 104, 115–16, 143.

of circularity,[27] but he does not succeed in differentiating clearly between the two pairs of concepts of *homogeneity-heterogeneity* and *atomicity-circularity*. It is indeed impossible to define pure competition (Dr. Triffin's atomistic homeopoly) in terms of cross-elasticity of demand in a manner which keeps it distinct from its antithesis, *i.e.*, pure monopoly.[28] According to Dr. Triffin's classification, if firm i is a pure monopolist, the cross-elasticity of demand for its product in terms of the price of the product of any other firm j becomes zero; if firm i is in pure competition with firm j, the cross-elasticity of demand for the product of firm i in terms of the price of the product of firm j becomes infinite. Yet it should be obvious that, under conditions of pure competition, it is impossible for firm j to affect the *actual* volume of firm i's sales. If it could do so, firm i should also be considered capable of affecting the sales of firm j, and the relationship would indeed be circular rather than atomistic, which contradicts our assumption that the situation is purely competitive. In a purely competitive situation, the cross-elasticity of demand for the product of firm i in terms of the price of the product of firm j becomes zero, *in terms of actual or realizable changes in the volume of firm* i*'s sales*. On these grounds, however, we should consider every pure competitor as being a pure monopolist! It seems impossible, therefore, to distinguish between pure competition and pure monopoly on the basis of Dr. Triffin's criterion.

A distinction between two related but different concepts seems to be needed if we are to salvage the concept of cross-elasticity of demand for purposes of market classification and measurement of monopoly power in terms of competitive relationships. We should restrict the coefficient of cross-elasticity of demand to *potential* changes in the volume of a firm's sales, and coin a new coefficient to associate *realizable* relative changes in the volume of a firm's sales with relative changes in the prices of the products of other firms. The cross-elasticity coefficient measures potential changes in the sense that it depicts only the readiness of *de-*

[27] On page 104 he defines the relationship between two firms i and j as circular, if the two partial derivatives

$$\frac{p_j \delta q_i}{q_i \delta p_j} \text{ and } \frac{q_i \delta p_j}{p_j \delta q_i}$$

are both greater than zero. (q refers to quantity sold and p to price.) On pages 115–16, however, he defines the relationship between firms i and j as circular, if

$$\frac{\delta \pi_i}{\delta p_i} \text{ and } \frac{\delta^2 \pi_j}{\delta p_j \delta p_i}$$

are both positive. (π stands for profits.) For a critical review of Dr. Triffin's concepts see S. Weintraub, "The Classification of Market Positions: Comment," *Quart. Jour. Econ.*, Vol. LVI (1942), pp. 666–73, and E. F. Beach, "Triffin's Classification of Market Positions," *Canadian Jour. Econ. and Pol. Sci.*, Vol. IX (1943), pp. 69–74.

[28] See E. F. Beach, *op. cit.*, p. 71, and Morgan, *op. cit.*, p. 461, n. 3.

mand units to shift from one seller to another, following a price change. The new coefficient should take into account the capacity of the firm which attracts demand units by cutting price to match them with *supply units*. This new coefficient may be called the *coefficient of penetration*, inasmuch as it measures the capacity of a firm to cut into the volume of another firm's sales by reducing price. In order to define clearly the meaning of this new coefficient, and to indicate its relationship to the coefficient of cross-elasticity we must resort to symbolic presentation.

Let $q_i = f_i\ (p_i,\ p_j,\ P_{N''})$ be a simplified form[29] of the demand function for the product of firm i. q_i stands for the volume of product of firm i demanded, p_i for the price of the product of firm i, p_j for the price of the product of firm j, and $P_{N''}$ for *the* "price" of all the other firms in the industry.[30] The *cross-elasticity of demand* for the product of firm i in terms of the price of the product of firm j, then, is

$$N_{q_ip_j} = \frac{p_j}{q_i} \cdot \frac{\partial}{\partial p_j} f_i(p_i,\ p_j,\ P_{N''}).$$

The *coefficient of penetration* of firm j into the market of firm i may be defined as

$$R_{q_ip_j} = K_j\left\{\frac{p_j}{q_i} \cdot \frac{\partial}{\partial p_j} f_i(p_i,\ p_j,\ P_{N''})\right\} = K_jN_{q_ip_j}$$

where K_j is a factor which may assume any value between zero and unity, including both, $(1 \geqq K_j \geqq 0)$.

K_j is, in fact, an index of the capacity of firm j to match with supply units the demand units which stand ready to shift to it following its price change.[31] It will be readily admitted that this concept of an index of the capacity to match (with supply units) increases in quantity demanded following a price cut, is most awkward. It is nevertheless a very important tool in the study of competitive relationships. It may be thought of as a function of the price elasticity of demand for the product of the price-cutting firm, and of the elasticity of an output-outlay function. Symbolically:

$$K_j = \phi_j\left(\frac{p_j}{q_j} \cdot \frac{\partial}{\partial p_j} f_j(p_i,\ p_j,\ P_{N''}),\ \frac{z_j}{q_j} \cdot \frac{d}{dz_j} F_j(z_j)\right)$$

[29] The function is simplified because it leaves out all independent variables other than prices, and also because all prices (other than the prices of i and j) have been grouped into a single independent variable P_N''.

[30] P_N'' may be taken as the weighted average price of all the firms in the industry (other than i or j), on the assumption of an unchanging price-structure.

[31] All the measures refer to price cuts rather than price changes. Since we are formulating them in terms of instantaneous rates of change, however, the distinction loses its importance.

where $q_j = f_j(p_i, p_j, P_{N''})$ is a simplified form of the demand function for the product of firm j, and $q_i = F_j(z_j)$ is the output-outlay function of firm j.[32] The price elasticity of demand for the product of firm j is a measure of the responsiveness of the quantity demanded to changes in its price, whereas the elasticity of the output-outlay function is a measure of the firm's capacity to expand output to match the increases in the quantity demanded following a price cut. These two elasticities determine between them the value of K_j.[33] Although we do not know much about the shape of ϕ, we do know that k is an increasing function of the elasticity of the output-outlay function and a decreasing function of the elasticity of demand.

It becomes possible now to define certain limiting cases of market or industry types, in terms of the coefficient of cross-elasticity of demand and the coefficient of penetration. I will restrict myself to the discussion of the well-known *symmetrical* cases, in order to avoid making the argument unduly complex. This classification of market structures will run in terms of homogeneity *versus* heterogeneity,[34] and atomicity *versus* circularity in competitive relationships. Atomicity and circularity must be defined before we can proceed: *Two firms are atomistically competitive if either one is incapable of penetrating the other's market. Two firms are circularly competitive if both are capable of penetrating each other's market.*[35] Since we restrict the discussion to symmetrical cases, the situation in which firm j is able to penetrate firm i's market, but firm i is incapable of penetrating firm j's market, is automatically excluded. We may now proceed with the classification:

(a) *Atomistic Homeopoly:*

It may be defined as the market structure of an industry in which *any* two firms i and j are homogeneously and atomistically competitive. Symbolically:

[32] The output-outlay function is merely the *inverse* of the total cost function.

[33] There remains, of course, the very thorny question of the nature of this output-outlay function. Both Nq_ip_i and Rq_ip_j involve instantaneous relative rates of change. So does $z_j/q_j \cdot dq_j/dz_j$. But is $F_j(z_j)$ a "market period," a "short-run" or a "long-run" function? The demand functions involved must needs refer to an instant of time. They incorporate the structure of interdependencies existing at an instant of time. But if $F_j(z_j)$ were to refer to the "market period," its elasticity with respect to outlay would be nil. A "short-run" output-outlay function (involving the usual assumptions of fixed plant and equipment) seems to make more sense for the problem at hand. This discrepancy between the time-dimension of the demand functions and the time-dimension of the output-outlay function is not damaging, however, to this purely abstract formulation.

[34] Two firms i and j may be said to compete homogeneously if $Nq_ip_j = \infty$; they compete heterogeneously if $\infty > Nq_ip_j > 0$.

[35] It must be emphasized that the definitions given to atomicity and circularity in this paper differ from those of Dr. Triffin.

$$N_{q_ip_j} = \infty$$
$$R_{q_ip_j} = 0$$
$$R_{q_jp_i} = 0.$$

(b) *Atomistic Heteropoly:*

It may be defined as the market structure of an industry in which *any* two firms i and j are heterogeneously and atomistically competitive. Symbolically:

$$\infty > N_{q_ip_j} > 0$$
$$R_{q_ip_j} = 0$$
$$R_{q_jp_i} = 0.$$

(c) *Circular Homeopoly:*

It may be defined as the market structure of an industry in which *any* two firms i and j are homogeneously and circularly competitive. Symbolically:

$$N_{q_ip_j} = \infty$$
$$R_{q_ip_j} > 0$$
$$R_{q_jp_i} > 0.$$

(d) *Circular Heteropoly:*

It may be defined as the market structure of an industry in which *any* two firms i and j are heterogeneously and circularly competitive. Symbolically:

$$\infty > N_{q_ip_i} > 0$$
$$R_{q_ip_j} > 0$$
$$R_{q_jp_i} > 0.$$

(e) *Pure Monopoly:*

It may be defined as the market structure of an industry in which competition is totally absent. Firm j is a pure monopolist if the cross-elasticity of demand for its product in terms of the price of the product of *any* other firm i in the economy becomes zero.

It should be stated again that the five cases discussed are limiting cases. The discussion could be extended indefinitely if we considered asymmetrical cases, which, of course, abound in actuality.

IV

We are ready now to turn to the formulation of measures of monopoly power in terms of the structure of competitive relationships. Let us se-

lect a firm j and attempt to measure its power vis-à-vis its competitors.[36] A firm's capacity to penetrate its competitors' markets is ***specific, i.e.***, it relates to individual competitors' markets separately, and cannot, therefore, be given a general expression. The whole list of penetration coefficients of a firm (say j) into the markets of its competitors (say $a, b, c, \cdots i, \cdots n$) is required if we are to obtain a balanced picture of its position in the market.

$$R_{q_a p_j},\ R_{q_b p_j},\ R_{q_c p_j},\ \cdots\ R_{q_i p_j},\ \cdots\ R_{q_n p_j}.$$

The coefficient of penetration, however, is only the first of the required measures. It measures the capacity of firm j to penetrate its competitors' markets. Firm j's monopoly power vis-à-vis its competitors is not limited to its capacity to penetrate their markets. Its capacity to withstand attacks on their part is equally important. We need, then, a coefficient of insulation which will measure the degree of non-responsiveness of the actual volume of sales of firm j to price cuts initiated by its competitors. The structure of this coefficient of insulation is obvious only in the limiting case of homogeneous competition among firm j's competitors. When competition among them is homogeneous, the cross-elasticity of demand for the output of firm j in terms of $P_{N'}$[37] is equal to the cross-elasticity of demand for the output of firm j in terms of the price of any of its competitors (say firm i). Symbolically:

$$N_{q_j P_{N'}} = N_{q_j p_i}, \quad \text{if} \quad N_{q_i p_h} = \infty,$$

where i and h are *any* two firms, other than j, in firm j's industry. The coefficient of insulation of firm j from competition, in this limiting case, is merely the reciprocal of the coefficient of penetration of its competitors, treated as a single firm, into firm j's market.

We are entitled to treat N' firms as a unit, however, only because they are competing homogeneously.[38] The problem becomes somewhat more complex when the competition among N' firms is heterogeneous. Under conditions of heterogeneous competition among N' firms we must sum the separate penetration coefficients of N' firms in order to obtain the over-all coefficient of penetration of N' firms into firm j's market. This process of summation is not simple. The capacity of any firm i, among N' firms, to penetrate firm j's market, when firms N' reduce prices simultaneously, may be substantially greater than its capacity to penetrate firm j's market when it alone reduces its price.

[36] The formulations which follow are independent of the type of industry concept selected. They are valid whether we adopt the firm-centered or the group-centered industry concept.

[37] $P_{N'}$ stands for the weighted average prices of all the firms in the industry other than j, on the assumption of a constant price-structure.

[38] Professor Morgan's measure is implicitly based on this assumption.

This is due to the fact that K_i may assume different values in the two cases; in fact it may assume a much larger value in the former case than it does in the latter. We have seen that K_i is a decreasing function of the elasticity of demand for the product of firm i. The elasticity of demand for firm i's product is normally lower in terms of P_N' than it is in terms of p_i, inasmuch as the elasticity of a "genus-type" curve is normally lower than the elasticity of a "species-type" demand curve.[39] This should explain the difference between the two values of K_i, and, therefore, the difference between the two penetration coefficients of firm i in the two situations. Symbolic presentation will clarify the argument. In order to avoid confusion, however, it seems best to adopt a new set of symbols for the formulation of the coefficient of insulation.

We may substitute λ for K and ρ for R in the formulation of the coefficient of penetration of firm i into firm j's market, when N' firms reduce their prices simultaneously.

$$\rho_{q_j p_i} = \lambda_i N_{q_j p_i}$$

where

$$\lambda_i = \psi_i\left(\frac{P_{N'}}{q_i}\cdot\frac{\partial}{\partial P_{N'}} g_i(p_j, P_{N'}), \ \frac{z_i}{q_i}\cdot\frac{d}{dz_i} F_i(z_i)\right)$$

and $q_i = g_i(p_j, P_{N'})$ stands for a (simplified) "genus-type" demand function for the product of firm i. From this it follows that $\lambda_i \geqq K_i$ and that $\rho_{q_j p_i} \geqq R_{q_j p_i}$. $R_{q_j p_i} = \rho_{q_j p_i}$ in the limiting case where firm i is the single competitor of firm j.

It is legitimate now to sum the ρ's of firms N' and take its reciprocal as the coefficient of insulation of firm j. Symbolically the coefficient of insulation of firm j may be defined as

$$L_{q_j P_{N'}} = 1 \Big/ \sum_{i=1}^{N'} \rho_{q_j p_i}.$$

V

Neither R nor L lend themselves easily to measurement. This, of course, is not peculiar to these concepts. All suggested measures of monopoly power are more or less subject to this limitation. Fortunately, however, R and L may be employed in an *ordinal* sense to describe the structure of the balance of power in an industry or market. This should not be taken to mean that we can dispense entirely with *cardinal* measures. We still need to know something concerning the "whereabouts" of R and L. More specifically, we need to know whether they become

[39] See note 11.

zero or infinite or tend to assume a finite positive value. Once we know this much about the absolute values of the coefficients, we may turn to their ordinal values. An example may clarify this statement. Let us assume that in an industry comprising three firms (i, j, and k) all the coefficients assume a finite positive value. Symbolically:

$$\begin{array}{ll} R_{q_ip_j} > 0 & \\ & L_{q_jP_{N'}} > 0 \\ R_{q_kp_j} > 0 & \\ R_{q_jp_i} > 0 & \\ & L_{q_iP_{N'}} > 0 \\ R_{q_kp_i} > 0 & \\ R_{q_jp_k} > 0 & \\ & L_{q_kP_{N'}} > 0. \\ R_{q_ip_k} > 0 & \end{array}$$

This is just another way of saying that all firms are insulated to some extent, and that all the firms are capable of penetrating one another's market to some extent. If now, in addition to this, we can say that

$$R_{q_ip_k} > R_{q_jp_k} > R_{q_ip_j} > R_{q_jp_i} > R_{q_kp_j} > R_{q_kp_i}$$

and that

$$L_{q_kP_{N'}} > L_{q_jP_{N'}} > L_{q_iP_{N'}}$$

we have a good understanding of the most important aspects of the structure of the balance of power in this industry. Exact cardinal measures would not add substantially to our knowledge.

Intelligent guessing based on information concerning substitutability among products, shares of the market represented by each firm's sales, and degrees of plant and equipment utilization by the firms in the industry, should enable the investigator to arrive at a meaningful description of the structure of monopoly power in the industry. Even limited information concerning product substitutabilities should make it possible for him to assign to cross-elasticities a value of zero or infinity, or to arrive at the conclusion that the cross-elasticity assumes a finite positive value. Finally, even limited information concerning firm's shares of the market and degrees of plant and equipment utilization should enable him to make tolerable approximations to the values of k.[40] From there on the task of describing, in terms of the R and L

[40] Other things being equal, k must be an increasing function of the share of the market represented by a firm's sales and a decreasing function of the degree of plant and equipment

coefficients, the structure of monopoly power prevalent in the industry should not prove exceedingly difficult.

Inasmuch as k may be thought of as an increasing function of the share of the market represented by a firm's sales,[41] we are entitled to say that both R and L are increasing functions of the share of the market represented by a firm's sales. On the other hand, whereas R is an increasing function, L is a decreasing function of the cross-elasticity of demand. It follows that no firm can ever possess both aspects of monopoly power, vis-à-vis its competitors, to the maximum degree. In the case of pure monopoly, for instance, L becomes infinite, whereas R becomes zero. It may not be amiss to indicate briefly the value or the range of values of the two coefficients for a firm (say firm j) within the various *symmetrical* limiting cases of market structures.

(a) *Atomistic Homeopoly:*

$$R_{q_ip_j} = 0, \qquad L_{q_jp_{N'}} = 0.$$

(b) *Atomistic Heteropoly:*

$$R_{q_ip_j} = 0, \qquad \infty > L_{q_jp_{N'}} > 0.$$

(c) *Circular Homeopoly:*

$$R_{q_ip_j} > 0, \qquad \infty > L_{q_jp_{N'}} \geqq 0.$$

(d) *Circular Heteropoly:*

$$R_{q_ip_j} > 0, \qquad \infty > L_{q_jp_{N'}} > 0.$$

(e) *Pure Monopoly:*

$$R_{q_ip_j} = 0, \qquad L_{q_jp_{N'}} = \infty.$$

VI

Some may raise the objection that these measures of monopoly power and criteria for market structure classification are based exclusively on price competition, and do not take into account the effects that changes in selling outlay and product variation on the part of a firm may have on the sales volume of another firm. Dr. Triffin admits the validity of a similar objection to his study. "A price classification, as the one proposed in this study, is by no means exhaustive and, strictly speaking, it should be complemented with similar classifications based on other strategic factors in business competition."[42] I can agree with Dr. Triffin

utilization. This follows from the fact that k is a decreasing function of the price-elasticity of demand and an increasing function of the elasticity of the output-outlay function.

[41] See previous note.

[42] *Op. cit.*, p. 98, n. 1.

only if it is assumed that the demand for a firm's product is a continuous function of the "product"[43] and selling outlay incurred by the firm as well as of the "products" and selling outlays of its competitors. In these circumstances "product" and selling outlay cross-elasticities would be meaningful measures. Such an assumption, however, is most dangerous. Fundamental changes in sales policies and radical alterations of the product are innovational in character, and would cause abrupt *shifts* of the demand functions. Such shifts constitute changes in the *market balance of power.* Changes in the market balance of power, however, imply alterations of the market structure; they raise questions of transition from one to another type of market structure, and, therefore, defy any descriptive and classificatory attempt. Can we distinguish between innovational product and sales policy changes and non-innovational variations of the "product" or selling outlay? Unless we can do so, it seems futile to attempt to extend our analysis to include product variation and selling outlays. Price cross-elasticities are ideally suited for our purpose, since they bring out the interdependencies inherent in a *given* market structure and no more.[44]

One additional comment is in order. The measures of monopoly power presented in this paper constitute "snapshots" of the structure of power relationships prevalent at a given instant within a system of firms. It must be recognized, of course, that competitive firm behavior elicits continuous changes in the power structure within an industry and may at times lead to spectacular transitions from one market type or position to another. In so far, in fact, as such firm behavior is conditioned by the structure of power relationships in the immediate environment of the firm, there is a dynamic or evolutionary nexus between structure and behavior which constitutes the flesh and blood of the competitive process. The analysis of this process lies, of course, outside the scope of this paper.[45]

[43] This presupposes, of course, that we have been successful in quantifying the "product" variable.

[44] We must be careful, however, even when we deal with price cross-elasticities. Only *point* cross-elasticities bring out the interdependencies inherent in a *given* market structure. *Arc* cross-elasticities involve changes in the structure of balance of power in the market.

[45] It may not be amiss to indicate the manner in which the concepts developed in this paper may be put to use in interpreting our antitrust legislation. The Sherman Act, for instance, takes on a much clearer meaning for the economist when couched in terms of the concepts presented in this paper, than it would otherwise possess. Section 2 makes it illegal for any firm (or group of firms) to make use of its (their) aggressive (penetration) monopoly power vis-à-vis its (their) competitors. In a circularly homeopolistic industry an independent price cut by a firm would constitute *use* of its (penetration) monopoly power vis-à-vis its competitors. If, on the other hand, firms in a circularly homeopolistic industry agreed *not* to use their (penetration) monopoly power vis-à-vis one another they could be held as violators of section 1 of the Sherman Act, in so far as such an agreement is tantamount to an agreement not to compete in the price dimension. This peculiarity of the Sherman Act is brought out forcefully, I believe, when we employ the concept of "penetration" as defined in this paper.

STABILIZING RESIDENTIAL CONSTRUCTION—A REVIEW OF THE POSTWAR TEST

By LEO GREBLER*

I

Stabilization of construction activity, as a means of cushioning general business fluctuations, received considerable attention both before and during the war. The limitations of stabilization policies operating through a single, though major activity, such as construction, were more and more recognized, but it was widely believed that greater stability in the volume of construction itself would be a worthwhile objective. The two types of construction in which government action toward greater stability was held to be most promising were public construction and residential building.

The opportunities for government action were obvious so far as public construction was concerned, although there were differences of opinion over the magnitude of these opportunities and the possibility of coordinated measures by the numerous federal, state, and local government bodies. The inclusion of residential building in proposed stabilization policies rested principally on two grounds: (1) Stability of public construction alone, even if it were possible, could not be expected to maintain a reasonably stable volume of total new construction, and (2) The federal government could exert considerable influence on the volume and direction of residential building through the various financial aids which were developed during the 'thirties.

This writer some time ago suggested a framework for a federal housing policy that was designed to mitigate the pronounced cyclical fluctuations in residential construction activity. The proposed means were withdrawal or reduction, during periods of high demand for dwellings, of federal financial aids, and return or intensification of these aids during periods of low demand for dwellings. In detail, the proposal contemplated variations in downpayment requirements, maximum amortization periods, and maximum interest rates for mortgage loans accepted for insurance by the Federal Housing Administration; synchronized credit policies of the Federal Home Loan Banks in extending loans to its member institutions which are primary mort-

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gage lenders; and variations in the volume of such federally aided public housing programs as may be approved by the Congress as a matter of long-range housing policy.[1] As one of several supplemental policies it was recommended that the Federal Housing Administration during booms refuse to recognize excessive building costs in its appraisals, which would automatically lower the ratio of loan to purchase price and would therefore be tantamount to requiring larger downpayments. These suggestions were later broadened to include steps toward greater stability in the volume of public construction, through different means.[2]

It was made clear that the proposals did not contemplate "a rigid maintenance at all times of a predetermined volume of construction" and that they could be adapted to changing business conditions. One of the purposes of the suggested policies was "to break the overextended cost-price structure that characterizes building booms," by withholding public construction and by tightening of credit terms for private housing during boom periods.

II

The course of government housing policies from VJ-day to the end of 1948 furnishes an instructive record in respect to these and similar proposals. The postwar experience now covers a sufficiently long period to permit at least some preliminary conclusions. While legislation in the early phase of this period proceeded in the twilight of doubt over the prevalence of inflationary or deflationary forces in the transition from war to peace, the preponderance of inflationary tendencies was apparent during at least three-fourths of the time elapsed from VJ-day to the close of last year.

The preliminary conclusions of this review are disappointing for those who expected that the greatly increased responsibilities of the federal government for economic stability, and the government's direct fiscal interest through its heavy commitments and involvements in the housing market, would stimulate the adoption of policies designed to mitigate fluctuations in this segment of the economy. In summary, the first acid test for the adoption of such policies has been negative. Legislative actions since VJ-day have been designed to enlarge the effective demand for new housing through cheap credit and similar devices. These actions were taken at a time when the demand already exceeded the supply of new dwellings which was limited by materials

[1] "Housing Policy and the Building Cycle," Rev. Econ. Statistics, Vol. XXIV, No. 2 (May, 1942), pp. 66-74.

[2] *Stabilization of Construction Employment—A Step toward Over-All Stabilization,* in The Winning Plans in the Pabst Postwar Employment Awards (Pabst Brewing Company, Milwaukee, Wis., 1944).

and labor resources, with effects that have contributed to instability. The trend becomes evident from a brief review of recent legislation:

1. The Servicemen's Readjustment Act of *June 1944* provided for the guarantee by the Veterans Administration of G.I. home loans covering up to 100 per cent of the "reasonable normal value" of the property. Thus, the concept of low downpayments developed in the FHA mortgage insurance system before and during the war was stretched further to the extreme of no downpayment loans. The guarantee was for 50 per cent of the mortgage principal but could not exceed $2000.

2. An amendment to this act in *December 1945* increased the maximum amount of guarantee from $2000 to $4000 and changed the basis of appraisal from "reasonable *normal* value" (italics supplied) to "reasonable value." Thus, valuations under this program were loosened rather than tightened.

3. The wartime Title VI of the National Housing Act, which allowed much more liberal FHA financing of new housing for war workers than was possible under the peacetime FHA program, and which had become inactive in the Fall of 1945, was re-enacted in *May 1946* for veterans' housing. At the same time, various provisions of the act were further liberalized. The basis for determining the loan amount was changed form the customary "value" concept to that of "necessary current cost." The maximum loan amount for single-family dwellings was raised from $5400 to $8100, with similar adjustments for other types of dwellings. Title VI was allowed to expire on April 30, 1948, but was again revived for rental housing in August of that year.

4. The Housing Act of *1948,* which represents essentially the much debated Taft-Ellender-Wagner General Housing Bill minus public housing and urban redevelopment, contained the following provisions for stimulation of housing construction:

(a) Special FHA insurance aids and RFC loans for prefabricated and other mass-produced housing;

(b) 90- to 95-per cent insured loans for small new houses with amortization up to 30 years and other liberalizations of the prewar terms for FHA home financing, which in effect tend to offset the withdrawal of cheap home-financing credit under Title VI;

(c) 90-per cent FHA insured loans for rental housing and 95-per cent loans for cooperative veterans' housing;

(d) Authority of the Federal National Mortgage Association to purchase certain FHA and veterans' home loans, up to 50 per cent of the total loans of this type originated by a lender, virtually permitting lenders to make these loans and turn them over to a government-owned holder;

(e) FHA insurance of investments in certain types of rental housing (so-called yield insurance).

The emphasis in public discussion on the exclusion of federal aids for public housing and urban redevelopment has obscured the significance of the federal financial aids which are incorporated in this act. The only recognition in the act of possible inflationary influences is expressed in a slight tightening of the appraisal basis for rental housing projects under Title VI of the National Housing Act, and in the authorization to increase the maximum interest rate for veterans' home loans from 4 per cent to 4½ per cent (which at the time of this writing had not been used).

This sketchy summary deals only with major financial aids. It omits non-financial aspects of the Veterans Emergency Housing Program which was in effective operation roughly one year, from the Spring of 1946 through the Spring of 1947, and which contained a great many unstabilizing elements. One of these was the program target itself of 2,700,000 housing units within two years, which was utterly unrealistic in terms of prospective materials and labor availability unless one assumed the presence of large, idle (and transferable) resources, a condition which actually did not obtain. The high target and the attendant drive caused a large initial volume of starts of housing units, the completion of which was delayed. The resulting pressure added to the upward movement of costs and prices. The control and priority features of the program failed to perform the intended function of giving housing a prior claim on economic resources, as this writer sees it, primarily for these reasons: (1) The program itself did not recognize the breadth and depth of controls that were necessary for its accomplishment in an atmosphere of fairly general overemployment, and (2) The community-at-large was unwilling to forego other things in favor of housing to anywhere near the extent to which it was willing to forego other things in favor of waging war.[3]

III

On the whole, it is only fair to say that federal credit policy in respect to housing since VJ-day represents an extension and intensification of devices which originated during the depression and were judged to have had a degree of success in restoring the badly shattered real-estate and mortgage markets and in stimulating new residential construction. This experience was broadly projected into the postwar period, only that stronger and stronger doses of the same medicine were administered. There has been little recognition in federal policy of the fundamental difference in the effects of liberal credit during

[3] For a more extensive though preliminary appraisal of the Veterans Emergency Housing Program, see Coleman Woodbury's paper before the 59th Annual Meeting of the American Economic Association, *Papers and Proceedings*, *Am. Econ. Rev.*, Vol. XXXVII, No. 2 (May, 1947), p. 508. The present article deals only with the trends and implications of federal financial policies in respect to residential building.

periods of substantial underutilization of resources and during periods of full employment or overemployment of resources. During the 'thirties, of course, it was possible through liberal credit to stimulate the demand for housing without substantial rise in the cost of, and the price for, new dwellings. The large unused resources for construction could be brought back into employment without bidding up wages and materials prices. Moreover, the market for existing houses was a buyers' market in most areas and localities, and the large number of such houses offered for sale at distress or near-distress prices served as a check on prices for new dwellings. When the volume of new construction is limited by materials and labor supply and a sellers' market prevails for existing houses, as was the case from VJ-day to late in 1948, liberal credit is likely to push up costs and prices rather than to increase production, *i.e.*, to be inflationary.[4]

The processes through which these effects come into operation need not be explained to an audience of economists, but they require a great deal of explanation for legislators, administrators, and the public at large.[5] And even when they are adequately explained, one cannot be too certain that policy will be guided by considerations that necessarily place more emphasis on the long run than on the short run. If it is correct to assume that stabilization measures must include restraints during booms, they are apt, by their very nature, to hurt or inconvenience people or groups of people.

This was recognized in earlier proposals to restrain housing credit during periods of high demand. ". . . Problems of a political nature may arise in the execution of such a policy. Liberalization of mortgage credit terms has found general approval on the part of Congress, the home-buying public, and builders. The same quarters may bring pressure to bear against any tightening of credit terms on the upgrade of the cycle."[6] But the full force of political and social pressures was perhaps not adequately appraised. Federal housing policies since VJ-day were shaped almost exclusively in terms of relieving the housing shortage by maximum stimulation of new construction, and by

[4] It may be noted in passing that a public housing program would have had similar effects during the period under consideration. Public housing through 1948 was limited to a federal program of temporary veterans' housing including the relocation and reuse of existing temporary structures, and to a substantial volume of public construction in New York City. Other state and local programs were insignificant. The major program of permanent public housing adopted by the Congress in the summer of 1949 is not within the purview of this article which considers housing policies in the light of business conditions prevailing to the end of last year.

[5] For a lucid statement of these processes, see Ernest M. Fisher, "The Role of Credit in the Real Estate Market," address before the 41st Annual Meeting of the American Life Convention in Chicago, October 7-11, 1946.

[6] *Housing Policy and the Building Cycle*, p. 72.

the problems of housing for veterans. Policies of restraint would at least have appeared to compromise the objective of speedy provision of housing for veterans and of rapid removal of the shortage. The fact that veterans generally are lower in the income scale than non-veterans gave further impetus to liberalization of credit. Withdrawal of federal credit aids, once they were on the statute books, was handicapped both by political implications and by apprehension that such action would be more than corrective, *i.e.*, produce a sharp decline in the volume of construction.

While admitting the existence of powerful non-economic forces in shaping policy, the economist may well undertake to probe the means employed toward the attainment of purported ends. In this connection, it is worth while to examine broad relationships between liberal credit and the two principal objectives of federal housing policies since VJ-day: maximum increase in housing supply, and "channeling" of new housing into those family income groups which are considered to need it most. As to maximum increase in housing supply, the argument for liberal credit usually revolves around the point that a high rate of new construction is the only effective means of combating inflation in the housing market, and that liberal credit to accelerate the rate of construction is therefore anti-inflationary and stabilizing in effect. Housing represents, of course, the extreme case of durable goods where the strain on resources for a given increase in production is out of proportion to the immediate increase in total supply. Thus, an effort under full employment to raise the output of nonfarm dwellings during one year by 300,000 units, or roughly one-third the actual annual production in 1947 and 1948, would involve command over one-third more materials and labor resources (in the absence of technological miracles). Such an effort, if successful, must have a wholly disruptive effect on resource prices not only for the increment of 300,000 units but for all new units. Yet, it would increase the total supply of nonfarm housing by less than 1 per cent (on the basis of roughly 34 million nonfarm dwelling units standing in April 1947, according to the Bureau of the Census). The anti-inflationary effects of maximizing the rate of new construction and adding to the housing supply are extremely small and slow. The inflationary effects of liberal credit for maximization of new building are large and immediate, and yet lasting since they become embedded in long-term mortgage obligations.[7]

[7] The argument could be extended to alternatives of maximum output as a means of supplying housing for those not in possession of housing units. This would, however, involve the examination of rent control and its effects on both housing supply and housing demand. We are here concerned only with those principles that would apply under any circumstances during a period of full employment.

As to "channeling" new housing into middle- and lower-income groups, the argument for liberal credit rests on misunderstood implications of plain arithmetic. The arithmetic is simple enough: For example, the level monthly payment on a $1000 loan for 15 years at 5 per cent interest is $7.91 but is reduced to $6.33 when the terms are liberalized to 20 years and 4½ per cent, and to $5.28 when the terms are further liberalized to 25 years and 4 per cent. Therefore, it is concluded that liberalization of terms, particularly if limited to certain groups of the population and to new dwellings within certain broadly defined price or rent brackets, will bring new housing within the reach of consumers who otherwise could not afford it. This is, of course, patently wrong when at the same time the maximum loan-to-value ratio is increased, say, from 80 to 90 or 100 per cent, for this augments the amount of loan. In any event, the simple arthmetic assumes that loan amounts and prices are constant and remain unaffected by more liberal credit.

Actually, in a sellers' market, the more generous credit terms are capitalized into higher prices and larger loan amounts, which tend to nullify the benefits of lower interest rates, longer amortization periods, and lower or no-downpayment requirements. As a result, the moderate income groups for which the benefits were designed soon find themselves approximately where they were before, or in a worse position if the magnification effects of expectations on prices are considered. The forces producing this result cannot be measured precisely with now available tools of analysis, but their operation is illustrated by the fact that a 20-per cent increase in the price of houses and a corresponding increase in loan amount are sufficient to wipe out all of the benefits from a change in loan terms from 4½ per cent interest, 20 years, to 4 per cent, 25 years.

It is probable that credit aids in the first instance enabled more veterans to buy houses than would have been the case otherwise, or to buy them earlier. However, when the inflationary effects of the credit aids began to cumulate, the price rise eliminated an increasing number of marginal veteran-buyers, as is suggested by the sharp drop in veteran home loans since early in 1948, both in absolute number and in proportion to all home mortgage loans.

The magnitude of the inflationary effects of federal housing credit policies cannot be established in any conclusive fashion. Results of liberal credit cannot be dissociated from other factors that were at work simultaneously and created upward pressures on construction costs and even more on prices for the finished products. It is only fair to say that postwar conditions were conducive to unconservative lending practices even if such practices had not been sanctioned and

supported by the federal government. All that can be done is to show some quantitative relationships. Thus, in the neighborhood of 50 per cent of all new nonfarm dwelling units were financed by FHA and VA loans in both 1947 and 1948. The largest comparable proportion before the war was 35 per cent, and the 1945 proportion was 20 per cent. In the past two years, more than a quarter of the total number of nonfarm mortgages recorded (of $20,000 or less) were either FHA or VA loans, and they represented over 35 per cent of the total amount recorded. The comparable prewar proportion was about 12 per cent of the number and 20 per cent of the amount of mortgages recorded. The mortgage debt on 1- to 4-family nonfarm houses increased from less than $20 billion at the end of 1945 to $24.4 billion in 1946, approximately $30 billion in 1947, and probably $35 billion in 1948. Government-insured or -guaranteed loans now probably account for about one-third of this debt. In contrast, government-insured (FHA) loans represented little over 9 per cent of the debt in 1939.

It seems reasonable to infer from these data that the availability of government insurance or guarantee has had significant effects in expanding the supply of mortgage funds for the financing both of new construction and transfers of existing housing.

IV

It might perhaps be questioned that the experience since VJ-day represents a fair test of the political and social difficulties that beset a policy designed to bring greater stability to residential construction. The test has been limited to a postwar period in which a severe housing shortage and the problem of providing housing for veterans created unusual pressures. Could stabilization policies be more successful in different circumstances?

The postwar test has undoubtedly been conducted under adverse circumstances and may therefore be considered a most severe one. However, the annals of building booms show that they occur characteristically after wars. More importantly, the phenomena and forces creating a postwar housing boom are essentially the same as those creating any housing boom, except that they appear perhaps in more concentrated form. Housing booms are typically preceded by housing shortages involving hardships and pressures. Thus, as housing is increasingly clothed with public interest, there is real danger that the existence of a shortage will always tend to generate government actions of the same kind as were observed during this postwar period—actions which are likely to accentuate rather than mitigate fluctuations in the volume of residential construction. Consequently, the fact that housing has become a matter of national concern, and that residential

building is subject to strong governmental influences, may make government policies directed toward greater stability more rather than less difficult.[8] This danger will exist so long as the role of credit is not more clearly and generally understood, and so long as the conflict between the social objectives of economic stability and of rapid removal of the housing shortage (or rapid improvement of housing conditions) is not squarely faced. This conflict is a real one in a period of full employment when housing production cannot be maximized without sacrifice of economic stability, and when economic stability cannot be maintained without sacrifice of maximum housing construction.

But granted that liberalization of credit to speed new housing construction accentuates the boom, must this necessarily have an unstabilizing effect? In this field as well as others, stabilization proposals which include both restraining measures operating on the upgrade of the cycle and stimulating measures operating on the downgrade of the cycle have been met with the dictum that "there is nothing wrong with the boom." The objective of stabilization policies, in this view, should be the continuance of activity at boom levels.

The experience since VJ-day in housing construction as well as other lines has been a rather effective demonstration of the characteristics of booms, to which aggregative economics has paid scant attention. Only a few aspects will be mentioned such as the series of materials and labor bottlenecks that have plagued residential as well as other types of construction; apparent low efficiency of both labor and management; continuous upward pressures on costs and prices; disproportionate price increases for different resources; disruption and corruption of distribution exemplified by "gray markets"; a tendency toward low quality fostered by materials substitutions, poor workmanship, and emphasis on speed and easy profits characteristic of a

[8] The following passage from Roy Harrod's critique of recent British government policies may be noted in this connection: "One of the more sophisticated arguments, but a powerful one, in favour of the nationalisation or State control of certain industries is that the State will succeed in achieving a steadier flow of capital outlay in those industries, through good years and bad, than private enterprise, influenced as that has always been by the vagaries of the trade cycle. In this regard, then, it was claimed that the State should and would do better than private enterprise. As things are turning out, it is doing much worse. This is pre-eminently a time when private enterprise would tend to be induced, under the influence of the hyper-boom conditions that prevail, to go forward too hastily with its capital extensions. It was urged that the wise State, once in control of these enterprises, would go slower during the boom, despite the *prima facie* case for expansion, and speed up capital outlay during a depression, even when there was not an immediate financial case for doing so. In fact the State has indulged in greater excesses in this boom than private enterprise ever would. Its whole influence has been to increase rather than to damp down the tempo." *Are These Hardships Necessary?* (London, 1947), pp. 64-65.

sellers' market; long-term commitments by house purchasers and rental housing investors based on the most optimistic expectations. Since this is elementary, a reminder may suffice that maintenance of boom levels of activity entails the danger of maintaining imbalances such as these. The most serious among them is perhaps the tendency of construction costs and prices to rise more than other prices, and more than disposable income of large segments of the population. This tendency causes concern in view of the one fact on which practically all housing analysts seem to agree, *e.g.*, that cost is at the heart of the housing problem.

The imbalances of the boom result, of course, from efforts in the market place or in government to push output beyond the limits of capacity which has little short-term flexibility, especially during periods of generally full employment. A greater clarification seems to be needed of the relationship between output stabilization and capacity. A feasible objective of stabilization policies may perhaps be the maintenance of production at a level close to, but not exceeding, capacity.

It is possible to interpret recent federal housing policies as part and parcel of a long-term effort to devote a larger proportion of total resources to residential construction, which would require a continuous expansion of capacity over a considerable period of time. In this case, increasing relative costs might be considered the price paid for reallocation of resources. To the extent that consumers were unwilling or unable to cause the resource shift, the government would pay the price in terms of subsidies or losses on loans, and there would be little if any concern over imbalances produced in the process. If this interpretation is correct, the consequences of pursuing such a policy under conditions of full or nearly full employment must be clearly recognized. One of the consequences would be a snowballing of federal credit and subsidy aids as an increasingly large proportion of families would be unable to stay in the race between rising relative costs and prices and their ability to pay. Another likely consequence would be an increase in the relative cost of all types of construction, both private and public, since housing and other types of construction draw largely on the same materials and labor resources. In addition, government insurance of liberal home mortgage loans or direct government loans would seem to be an extremely poor means of executing such a resource shift. For these loans represent long-term obligations of millions of citizens, a large number of whom might have the notion of making strenuous efforts at repayment rather than "walk out" on the government when obligations become too burdensome. It is hardly a defensible public policy to favor cynical over honest borrowers.

V

It remains to consider briefly some of the implications of the federal housing policies during the past three years. So far, some of the financial (as well as other) aspects of the postwar housing boom have shown an amazing degree of resemblance to those of the boom after World War I—and an alarming one in view of the permanent improvements in mortgage lending practices and policies that were expected to result from the new federal instrumentalities such as the Home Loan Bank Board and the Federal Housing Administration. Shoestring financing in the production of housing and in the purchase of houses for owner-occupancy is probably as widespread as during the earlier period. That the combination of junior and first loans during the 'twenties has been replaced largely by government-guaranteed or -insured first mortgages covering 80 to 100 per cent of appraised value is a superficial difference, except that the high-percentage first mortgages of today are for long terms and provide for regular amortization, whereas the junior loans of the 'twenties were for short or medium terms. Moreover, the use of second mortgages which had been reduced sharply during the 'thirties appears to have increased substantially, although there are no statistical data to evidence this trend. Whether appraisal and underwriting procedures generally are any sounder than during the 'twenties is an open question, despite the addition of many "scientific" trappings to appraisal techniques.

Likewise, it is impossible, in the absence of sufficient data, to generalize on the question whether house purchasers during recent years have overcommitted themselves in the same degree that was observed during the boom of the 'twenties. The more general use of mortgage loans providing for regular amortization is probably the one feature which distinguishes recent mortgage lending from that of earlier periods; but it remains to be seen whether it will be a saving feature, since amortization of the now customary loans with long maturities is slow during the first few years. The fact that such a large proportion of mortgage loans outstanding is insured or guaranteed by the federal government will probably cushion the effect of untoward developments on financial institutions, but whether it will reduce the impact of such developments on the financial system as a whole remains an open question.

Some correction of lending practices characteristic of the immediate postwar period could be observed in late 1947 and in 1948 when mortgagees unquestionably developed a tendency toward greater caution and selectivity. A substantial proportion of government-guaranteed and -insured loans was written for shorter maturities and on lower loan-to-value ratios than the statutory maxima would suggest, and

loan rejections were on the increase. But this development was immediately interpreted by legislators and administrators as representing a shortage of mortgage funds and led to new government programs such as the secondary market operation of the Federal National Mortgage Association authorized in the Housing Act of 1948. In other words, such corrective market forces as have come into operation were weakened by government action pulling the other way, but the final result of the conflict between restraining market forces and stimulating government programs is still in the balance.

Thus, it would be premature to express any summary judgment as to whether recent financing practices fostered by government policies, if continued, will in the end necessarily produce a collapse of the kind and magnitude experienced after the boom of the 'twenties—in spite of uncomfortable parallels that could be observed. The outcome will, of course, be affected by many things other than those reviewed in this article. All that can be said with a degree of confidence is that recent governmental policies have done nothing to prevent fluctuations as great as, or even greater than, those observed in previous periods. They have certainly contributed to the sharp increase in building costs and in prices of new as well as existing houses.

Another implication is the kind of stabilizing government action that is left for application during periods of serious decline in the volume of residential construction. A great deal of the ammunition in the arsenal of government has already been shot away in the recent postwar boom, and will be shot away under the Housing Act of 1948. After supporting 80 to 100 per cent loans for housing during a period of full employment, at unprecedentedly low interest rates and for terms of 25 years or even more, what weapons are left to stimulate housing construction when a stimulus is warranted?

It appears that a program of cheap credit within the framework of private financial institutions could not be carried any further than it has been carried to date. Obviously, the guarantee of loans of more than 100 per cent of appraisal value or cost would be an absurdity and tantamount to a premium for builders and for purchasers.[9] The effects of further extensions of amortization periods would be less and less significant so far as total financial charges are concerned. Further reductions in mortgage interest rates would depend upon general money market conditions and the not yet fully tested ability of the monetary authorities to manipulate rates. The limits to continued reductions of mortgage interest rates were highlighted in late 1947 and 1948 when even a slight increase in general interest rate levels dimin-

[9] It may be noted that 90-per cent loans normally enable a builder to cover all of his out-of-pocket expenses or, in the lingo of the trade, to "mortgage out."

ished or wiped out the net-yield margin in favor of 4-per cent guaranteed home mortgage loans, and led to a diminishing supply of mortgage funds *at that rate*. Thus, the principal remaining weapons for future stimulation of residential building activity would seem to be (1) large-scale substitution of direct and probably not self-liquidating government credit for private credit, and (2) a large-scale program of subsidized public housing.

These measures, however, would come into operation at a much higher level of building costs caused by the government aids which were extended during the boom and would, in fact, tend to underpin that level of costs. They would, therefore, either not go as far as they might otherwise, or they would require much greater outlays and burdens than would be the case otherwise. In addition, there would be a profound change in the institutional framework of the American economy if direct government credit and subsidies were to become the principal supports of a high level of residential construction. These prospects may appear either gloomy or bright, depending upon viewpoints. But they must be evaluated against the alternative of more flexible policies in respect to credit and subsidies for housing, geared to minimizing output and employment fluctuations.

THE DYNAMICS OF PRICE FLEXIBILITY

By THOMAS C. SCHELLING*

I. *Introduction*

The purely theoretical case against price flexibility, as a device for restoring or assuring full employment, has recently come to hinge on dynamic considerations, specifically on the speculative reaction to price changes. Mr. Don Patinkin and Mr. Lawrence Klein have both stated this position.[1] They argue that, while there may at any moment be a price *level* which, if sustained, would yield full employment, the movement of prices toward that level would set off adverse reactions which would dominate the system, causing an aggravation rather than amelioration of unemployment.

It is the purpose of this paper to point out an incompleteness in their logic and to develop an explicit analysis of the dynamic problem involved. First we shall summarize briefly the argument of Mr. Patinkin and Mr. Klein and suggest wherein their omission lies; then we shall present a diagrammatic analysis of the subject.

Briefly Mr. Patinkin's argument is this. A fall in the general price level raises the real value of net cash assets.[2] The impulse to save is negatively related to the real value of net assets. A fall in general price level consequently lowers the savings function; a rise in price level raises it. There is some price level at which the savings function has the same value at full employment as the investment function.[3] Futhermore this "full employment" price level represents, in a certain sense, a stable equilibrium: if prices are too high, employment is less than full,

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[1] Don Patinkin, "Price Flexibility and Full Employment," Am. Econ. Rev., Vol. XXXVIII, No. 4 (Sept., 1948), pp. 543-64. Lawrence Klein, *The Keynesian Revolution* (New York, Macmillan, 1947), pp. 88, 89, 109.

[2] See Mr. Patinkin's discussion of what constitutes "net cash assets" for this purpose, *op. cit.*, pp. 549-51. The problem of definition is based on the fact that many cash assets, *e.g.*, most demand deposits, are offset by cash liabilities of others. Unless there are asymmetries of response, only certain government liabilities and the monetary gold stock may be included. Mr. Patinkin would include interest-bearing government securities held by the public; this inclusion is correct only if potential taxpayers fail to recognize an increase in the real value of discounted future tax liabilities—which they probably fail to do by and large, at least to a completely offsetting extent.

[3] Mr. Patinkin recognizes that the price level effect may be asymptotic.

prices fall; if prices are too low, employment is overfull, prices rise.[4] Mr. Klein outlines a similar case, although his orientation is principally toward the effect of larger real cash balances on the interest rate, hence on investment (and consumption, if one wishes).

To this line of reasoning Mr. Patinkin then raises two objections, a policy objection and a theoretical objection; Mr. Klein raises the same theoretical objection.[5] The policy objection is that the adjustment may take too long; wages and prices fall at some finite rate, perhaps the rate is slow and the required fall is great and many months or years are required to lift the real value of net cash assets to the full employment level. The theoretical argument is that the static hypotheses fail to represent all the essential parts of the economic system; expectations have been left out. For when expectations are admitted, it follows that the price changes may cause anticipations of further price changes which affect the level of employment in the opposite direction. When prices fall, and further decline is expected, consumers postpone purchases, businesses liquidate inventory and defer construction, etc. Consequently, while there exists some price level consistent with full employment, the adverse effects of price changes toward that level dominate, and "it is impossible to reach (or, having reached, remain at) such a position."[6]

The above argument may be attacked in either of two ways. One would be to deny the quantitative implications of it: the speculative effect *might* be small, the price level effect *might* be substantial. This becomes an empirical argument, and we shall not pursue it here. The other attack is to grant the essential mechanics of the thing, and proceed to trace the ultimate outcome.

First, it will probably be agreed that, in combatting unemployment, what we are trying to minimize is some function of the whole time pattern of unemployment. A brief period of severe unemployment will perhaps be considered less undesirable than some longer period of mild unemployment.

Second, price flexibility—or wage flexibility, since we shall assume close correspondence between wages and prices—means that when unemployment exists, wages and prices fall at some finite rate over time. (Instantaneous adjustment is not only empirically implausible but precludes the whole question of stability.) Furthermore, the rate of wage-price decline may be geared to the amount of unemployment. It may, in fact, be a rather complicated function of present and past unemployment, *i.e.*, duration may have some effect on the rate of price-

[4] We shall allow the process to work on both sides of full employment.

[5] Klein, *The Keynesian Revolution*, pp. 88, 89, 109.

[6] Patinkin, *op. cit.*, p. 559.

wage decline; but we shall assume that the time rate of change of wages and prices depends on the amount of unemployment.

The crux of our argument is this: the speculative expectation effect *may*, by initially increasing unemployment, accelerate the price decline and ultimately shorten the duration of unemployment. Essential to this result are two conditions: (1) that, after some lapse of time, the price *level* effect asserts itself over the anticipation effect, and (2) that the resulting time pattern of unemployment actually does, according to somebody's criterion, represent an improvement over the alternative, slower, direct approach to full employment, *i.e.*, the one which would occur in the absence of the "adverse" speculative reaction.

What we are talking about is a "cold turkey" remedy, in contrast to a tapering off. It is as though the best way to cure a cold were to make it initially worse so that the patient would go to bed and take care of himself.

It is difficult intuitively to see whether there is a flaw or hidden inconsistency in this argument. One might suspect that the mechanism works only if "peculiar" shapes are imputed to the relevant behavior functions. Fortunately, the whole analysis can be put into a diagram which, in spite of some multiplicity of variables, is fairly simple.

In the abstract, the problem to be studied is that of one variable whose rate of change over time is related to a second variable whose value in turn is related both to the value of the first and to the latter's rate of change over time. While the following analysis will proceed in terms of the present question of price flexibility, problems of this form may be found in other contexts.[7]

II. *Analysis*

First we must specify what our behavior functions are and formulate the concepts of adjustment and stability. We have two behavior equations in this model; they are all we need for the case being analyzed. One is this: the rate of wage-price decline depends on the amount of unemployment; specifically, the greater the unemployment, the faster the fall of wages and prices. Denoting unemployment by U, and the rate of price-wage decline by P′, we draw the curve labelled P′ (U) in the diagram to represent this relationship between the rate of price decline and the amount of unemployment. The horizontal axis (Figure 1) measures unemployment; the vertical axis, labelled P′, measures the rate of price decline in, say, per cent per month.

The second hypothesis is this: the level of unemployment depends on both the price level and the rate of price change. (We have implicitly, of course, an investment and a consumption—or savings—function.

[7] See the final paragraphs of this paper for two examples.

We may, to fix ideas, think of the absolute price level as determining the height of the savings function, and the rate of price change as determining the height of the investment function.) While income, or employment, depends only on price, it depends on two aspects of price: the level itself and its rate of change. We treat these as two separate variables (as far as the unemployment function is concerned). The two variables, P and P′, are completely related in that, knowing the course of P over time the course of P′ can be derived; and, given the

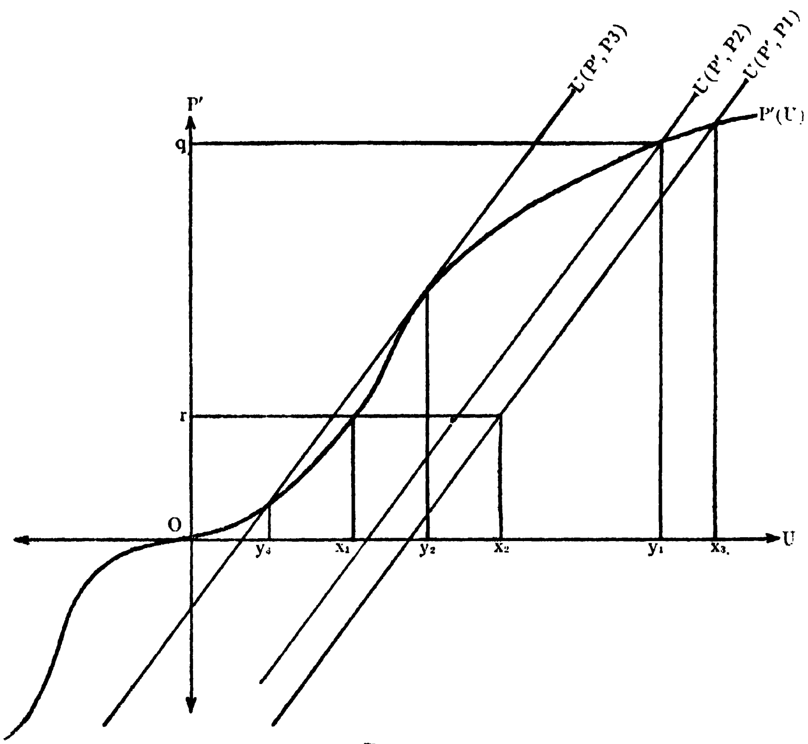

FIGURE 1

course of P′ over time and the initial value of P, the entire course of P can be constructed. It is as though some magnitude depended on both the speed and distance of a moving object, where the speed is, of course, the rate of change of the object's distance over time.

These two behavior functions would be sufficient to determine the course of the variables over time. If both of these functions are satisfied, *i.e.*, if the values of U, P, and P′ conform to our hypotheses, the time path of U and the time path of P (hence also of P′) can be traced if we know the shapes of the functions. We might be tempted at this

point to assume certain shapes for our behavior functions and trace out the time pattern implied in them, to see whether unemployment tended toward zero and price toward some equilibrium value. But this procedure would avoid the main problem, namely whether our two functions necessarily are, or can be, simultaneously satisfied. For in reality we are dealing here with two levels, or orders, of equilibrium: equilibrium in the sense of satisfaction of our two behavior functions —a dynamic equilibrium in which the variables are in motion—and "full employment equilibrium"—a static equilibrium whose condition is that P, U, and P′ have certain values, namely zero for U and P′. We must first ascertain whether our two behavior functions enjoy dynamic stability, before analyzing the implications of their simultaneous satisfaction.

We must look now at the concept of dynamic stability. Two or more behavior patterns (or functions, or equations) are considered stable if, when an initial set of actual values differs from those which satisfy the functions, the values of the variables ultimately approach those values which do satisfy them, these latter values being referred to as "solution values" or "equilibrium values." Inherent in this concept is the recognition that divergencies from equilibrium may occur, that the variables do not adjust instantaneously to their function values, *i.e.*, that the behavior patterns represent tendencies, propensities, or aggregates of individual intentions.[8] The solution of the behavior equations is significant only if (1) there actually is a solution—there is nothing sociologically necessary about the existence of a solution, *i.e.*, about the consistency of all economic intentions, and (2) the solution is stable as defined above. If the solution is not stable, the implications of simultaneous solution are largely irrelevant.

It is analytically useful—and frequently plausible empirically—to assume that one type of behavior adjustment is more rapid than the other, even instantaneously rapid by comparison. For example, in the cobweb analysis demand is usually assumed to adjust immediately to price, while supply responds slowly or with a lag. According to this point of view, one of the functions is considered to be always satisfied; *e.g.*, price-quantity combinations always satisfy the demand function in the usual cobweb analysis. Often, for purposes of analysis, it does not matter which variable is taken as adjusting instantaneously and which as the slow one whose behavior pattern is never satisfied until equi-

[8] That is, each function is itself one (short-run) equilibrium condition. The full interpretation of $U = f(P, P')$ is that:

$$\frac{dU}{dt} = \Phi[U - f(P, P')], \text{ where } \Phi[0] = 0$$

and Sign Φ $[U - f(P, P')] =$ minus Sign $[U - f(P, P')]$.

librium is reached. (In the present case this is so; in the cobweb case the stability conclusions are reversed.) Intermediate positions seem more realistic, in which rates of adjustment of both variables are explicitly considered, and neither function is quite satisfied until equilibrium is reached. Diagrammatic analysis is much simpler if we let one variable adjust rapidly in relation to the other; the reader can reverse or compromise this position in the analysis below, and convince himself that the conclusions remain valid.

Of the two functions, we shall consider the price-flexibility function as the rapidly adjusting one, *i.e.*, the function relating the rate of price-wage decline to the amount of unemployment, the one labelled P′(U). We assume, that is, that the rate of price-wage decline is always exactly geared to the amount of unemployment, in accordance with this function, with no appreciable lag. (Which is to say that it adjusts so quickly that no appreciable change occurs in either U or P while the adjustment takes place.) And we assume that unemployment adjusts at a slower rate, always moving *in the direction of* its value according to the unemployment function (which is a function of both P and P′).

We proceed now to the first diagram. The P′(U) function, relating the rate of wage-price decline to unemployment, is given an ogive shape, to indicate that price-wage rates fall slowly at low levels of unemployment, that the rate of price-cutting sharply rises beyond some critical unemployment level, and that it then tapers off to perhaps an asymptote. We give it this shape only to demonstrate the possibility of certain results, and not because of its compelling plausibility. This function goes through the origin, which only means that our definition of "price flexibility" is consistent with our definition of "full employment." It rises steadily to the right, and it appears in both the north-east and the south-west quadrant, those of unemployment and over-employment respectively, being negative (rising prices) in the over-employment range.

We next draw our unemployment function. Since our diagram is two-dimensional, we cannot show U as function both of P and of P′. So we draw the U function corresponding to a given value of P, namely P1, labelling this function U(P′, P1). This function rises to the right; it is drawn as a straight line for manipulative simplicity. If it were vertical, it would indicate the absence of the expectation effect; the less steeply it is sloped, the greater is the indicated sensitivity to price-change. Since the U function corresponding to P1 cuts the horizontal axis to the right of the origin, we know that P1 is greater than P_0, the full employment equilibrium price level, *i.e.*, the price level which, if sustained, would be associated with full employment. That is, the particular function drawn for P1 shows positive unemployment for zero rate of price change.

We assume now that price P1 exists, and that unemployment is of the amount denoted by x_1 on the diagram. (We have thus subjected our system to two disturbances from full equilibrium, one shifting the U function at current prices so that price is above equilibrium price, and another knocking unemployment out of line with the unemployment function.) Immediately prices begin to fall at the rate given by the P′ function, namely the rate r on the diagram.

With the given price, P1, falling at the rate r, unemployment tends to move toward x_2, the function value for U corresponding to P1 and r. This movement takes a finite length of time, during which (1) the rate of price decline increases in accordance with the P′ function, and (2) price itself is declining. So the path traced out by U and P′ is along the P′ function, toward the receding value of the U function. If the adjustment of U is fast relative to P′ (not relative to the adjustment speed of P′, which would be P′′, but to the rate of change of price itself) multiplied by the derivative of U with respect to P; *i.e.*, if the adjustment speed of U is fast relative to the *shift* of the U(P′) function as P changes; the "final" position is near x_3 with P′ equal to the P′ function value corresponding to x_3. But, if the price changes during the adjustment have shifted the U function appreciably, then the U function has been moving appreciably leftwards as U increased (for the falling price means a falling savings function and a falling unemployment function) and the end result is at, say, y_1, with price P2, and price now changing at the rate q.

But this "end result" is only the very short-run solution; for price is changing according to the P′ function, and the U function is therefore moving steadily leftwards. So y_1, q, and P2 only represent points on a moving equilibrium; P2 is not, except by coincidence, equal to P_0.[9]

Before taking the next step, we should notice that our intersection of the U and P′ functions is stable as we have drawn it; *i.e.*, an initial value of U off the U function approaches its function value (ultimately approaches it: the solution value may move ahead of U itself for some distance faster than U moves.) This is dynamic stability—of our behavior functions, not yet of the P_0 price-full employment equilibrium, although that will be seen later to follow. Had the U curve intersected the P′ curve from above, the behavior system would have been unstable (at least until another intersection were approached) and U would either rise or fall without approaching any limiting value.

It will be noticed that the expectation effect has aggravated unemployment. From an initial position x_1, U has increased to y_1. Had the U function been a vertical line (*i.e.*, without expectation effect) unemployment would simply have moved leftward from x_1, as price declined

[9] It could, of course, be less than P_0, since the U function has shifted leftwards. The implications of this possibility will become clear later.

and the vertical U function shifted leftwards. It should also be noticed that, at the new position y_1, price is declining much faster than it would have declined at or near x_1.

The next step is to trace out the subsequent courses of U, P, and P′. We shall assume that the price level effect is purely additive, *i.e.*, that the U function keeps its shape and moves leftward parallel to itself as price falls. And—solely to help keep track of our variables—we shall assume that equal successive percentage decreases in price cause equal absolute shifts to the left of the U function.[10]

We now introduce a clock and move the U function leftwards at a speed proportional to the value of P′. As the U function moves leftwards, P′ decreases and the leftward speed of the function diminishes. We can keep a time series record of unemployment as we go.[11]

When P has declined to P3, corresponding to the U function tangent to the P′ function, the short-run equilibrium becomes unstable, and U moves *at its own adjustment speed* toward y_3 (which is itself receding as price continues to decline.) By "its own adjustment speed" we mean the rate at which U moves toward its own function value, the one which was relevant for movement from x_1 to y_1.[12] From y_1 to y_2, U moved at a speed geared to the rate of leftward shift (itself proportional to P′) and the slopes of the two functions. (It might be that U's own adjustment speed were small relative to the rate of leftward shift; in that case U would always be limited by its own adjustment speed. We shall, in general, ignore this possibility.)

This movement from y_1 to y_3 is the conceptual reverse of the initial movement from x_1 to y_1. What has happened is that price has already declined substantially, and it is the rate of price decline which is

[10] That is, U is linear in the reciprocal of P.

[11] In this and the following paragraphs we make the very important assumption that the U *function* shifts slowly relatively to U's ability to adjust toward its function value, so that the intersection may be taken to denote the value of U. Strictly speaking, the value of U cannot be taken as lying quite on the function—else the value of U could not be changing. What we must envision is a rate of adjustment of U, toward its own function value, which varies with U's distance from its function value, rapid relative to the function's shift when U is any appreciable distance from its function value. And dU/dt may be taken, in short-run equilibrium, as given by $dU/dt = df/dt = f_p P' + f_{p'} P'' = f_p g(U) + f_{p'} g'(U) dU/dt$, or,

$$dU/dt = \frac{f_p\, g(U)}{1 - f_{p'} g'(U)}$$

where the numerator denotes the leftward shift of the U function, and the denominator allows for the slopes of the two intersecting curves. In the above notation we have written g(U) for P′(U) to avoid complication with primes; P′ and P″ are time derivatives, g′(U) is derivative of P′ with respect to U.

[12] This speed is not taken to be constant (*cf.* n. 11) but rather as varying with the distance from the function value.

holding unemployment at a high level. As employment creeps up, the rate of price decline slows down sharply in the region where the P′ function is steep, and a cumulative interaction sets in, a "multiplier effect" which finds U pushing its own function value ahead at a faster rate than U itself can adjust for some distance.

For a while, prior to tangency, there were three intersections, two stable equilibria with an unstable one between. At one of those price levels there were two possible equilibrium employment levels, each corresponding to a different rate of price change. Any autonomous jump of unemployment from one of these values to the other would have been a stable shift, *i.e.*, unemployment would have stayed fixed (in the short-run sense) at the new point.

According to the diagram, U then continues to move asymptotically toward zero, as P moves toward P_0 at a rate given by the P′ function. Before comparing relative severities of unemployment, we may consider a few interesting points. One of them is the question: can unemployment, according to these hypotheses, oscillate? We had one reversal of direction at y_1; can there be another?

If the P′ function has an ogive shape in each quadrant, *i.e.*, one inflection point in each quadrant, we have the result that U may reverse direction *but not more than twice,* aside from the original reversal at y_1. If the U curve tangent to the P′ curve cuts the horizontal axis to the left of the origin, the multiplier effect carries U over into the over-employment region, the south-west quadrant. This occurs because price has fallen below P_0. In this case, U starts back along the P′ curve in the south-west quadrant. (The intersection in that quadrant—if there is one—is necessarily stable.) The same thing can occur on the return trip, *i.e.*, a skip into the northeast quadrant. But, as the reader may test, it cannot then again skip back southwest so long as the P′ function has the general shape imposed above. Whatever the shape of the P′ function, so long as there are intersections in both quadrants, the number of oscillations is limited by the number of waves in the P′ curve.[13]

It is also clear from the diagram that, if the system shows short-run stability, there is also long-run[14] full employment stability. There is, however, the intermediate case, that for certain initial values there is short-run stability but after a finite time the process rolls off the track

[13] Again our conclusion rests on the assumption that the U function slides slowly relatively to the speed at which U can adjust. Without this assumption perpetual oscillation may be obtained.

[14] "Long run" as used here is the short run of usual analysis, *i.e.*, a period short enough that variations in the investment or consumption functions—other than those allowed for in the analysis—are susceptible of being ignored. Specifically, "long run" equilibrium refers to full employment and price P_0.

and becomes unstable. This could occur if the tangent U function crossed the horizontal axis left of the origin and there were no intersection in the southwest quadrant. In that case initial unemployment would be aggravated by the "multiplier effect," check itself and start its orderly return along the P′ function, and then "fly off on a tangent" into the overemployment side and keep forever going. This sort of thing could occur if the P′ function failed to show symmetry about the

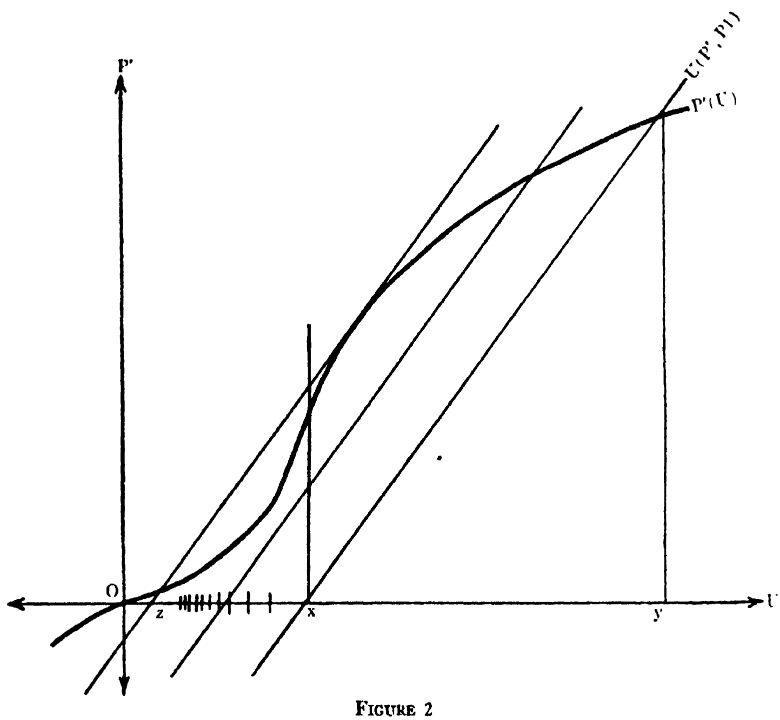

FIGURE 2

origin (which it need not), or could enter by the complication of the unemployment function's shape.[15]

Nothing will be argued here about the probable shapes of the functions. What has been demonstrated is that the expectation effect *need not* imply instability of full employment equilibrium, even though it does initially involve an increase in unemployment over what it would otherwise have been in the absence of anticipations. That is, whether

[15] If we allow our behavior functions to apply even at zero employment on the one side, and some comparable physical limit on the other, then long run stability can be guaranteed so long as P′ does not become infinite and we retain our assumption that U's own adjustment is fast relative to the rate of shift of the U function.

the price-change effect leads to stability or instability has been shown to be an empirical question.

We shall now demonstrate the possibility that the expectation effect reduces the "severity" of unemployment. Of course, individual value judgments enter at this point if severity is a welfare problem. But probably all value judgments would allow that the magnitude of unemployment could be offset by its brevity, *i.e.*, that the height at its peak is not the sole measure of severity.

An attempt has been made on the second diagram to space the successive U functions proportionately to the height of the P′ function, so that the various contour values of P denoted by the different U curves are equally spaced in time. (Here we make use of our simplifying assumption that U is linearly related to the reciprocal of P.) Similarly the cross ties on the horizontal axis, between the point x and the origin, are spaced horizontally in proportion to the values of P′ corresponding to the values of U they denote. They represent successive unemployment figures, equally spaced in time, in the absence of the expectation effect, *i.e.*, if the U function is vertical. (The cross ties should be vertical U functions intersecting the P′ curve; they are drawn as they are to keep the diagram clear.) We can compare now the two time series of unemployment under the two alternative assumptions of some, or no, expectation effect, by marking down the successive values of U corresponding to the successive intersections of the U and P′ functions, going from right to left.

We have drawn a favorable case for our argument. If we introduce the expectation effect in the form of the curve labelled U(P′, P1), we find that initial unemployment is about trebled. But we also find that it reduces, in two units of time plus some adjustment time (during the unstable phase from the point of tangency to z) to the amount of unemployment denoted by z. Without the expectation effect, P changes very slowly, and numerous units of time are apparently (the diagram is too coarse to permit counting) required for U to diminish to the amount z. Here we have procured, at the expense of severe unemployment for something over two units of time, a rapid fall in prices which brings us close to full employment, all through the agency of the "adverse" expectation effect.

A few other problems which share the form of that treated above may be suggested. If we suppose the rate of construction, X, related to the rent level, R, while the rent level itself is related to the stock of houses, S, and the national income, Y, we have: X = X(R) and R = R(S,Y). But the rate of construction is the time rate of change of the stock of houses, so we replace X by S′, obtaining S′ = S′(R), R = R(S,Y). If next we suppose that a principal determinant of the

level of national income is the rate of construction itself, *i.e.*, $Y = Y(S')$, then we can rewrite our two relationships as: $S' = S'(R)$, $R = R(S,S')$, which is formally identical with the price flexibility formulation. If, as we probably intended, S' is positively related to R, while R is related negatively to S and positively to S', the intersection of the two curves on our diagram will move toward a long-run equilibrium if dynamic stability is present—the only case in which the intersection is relevant.

Again, one might postulate (as we did above) that consumption is related to net assets as well as to the level of national income, and write $C = C(A,Y)$ to denote this. Letting Y, for simplicity, be the sum of consumption and investment, we then have $Y = C(A,Y) + A' = Y(A,A')$, for investment is simply the rate of change of assets (allowing for no price movements in the present case.) Then if we consider the level of income to be a principal determinant of the rate of investment, we have both $Y = Y(A,A')$ and $A' = A'(Y)$, which is formally similar to the price flexibility problem. In the present case we probably intend that Y is positively related to both A and A', so the intersection on our diagram will move steadily outward, to no long run equilibrium, if dynamic stability is present. And again, if the curves so intersect that dynamic stability is absent, the two relationships will not be satisfied in the first place; the course of their moving intersection is consequently without significance.

This last example suggests a further extension of the technique. We may consider investment, as well as consumption, to be related to total assets and national income, so that $A' = A'(A,Y)$ and $Y = Y(A,A')$. In that case both our curves, that relating Y to A' for a fixed value of A and that relating A' to Y for a fixed value of A, would shift over time as A changed at the rate A'. If the curves are dynamically stable, then whether A, A', and Y approach equilibrium depends on the relative shifts of the A' curve and the Y curve as A changes in value over time. (In this more complicated case, long-run equilibrium may be approached by some of the variables and not by others.)

WARBURTON VS. HANSEN AND KEYNES

By RENDIGS FELS*

In several recent papers, Clark Warburton has used statistical data on the velocity of money to defend traditional monetary theory and to dispute Keynesian theory.[1] His remarks raise five closely related problems, which will be discussed below: (1) the validity of the monetary theory of the cyclical downturn; (2) the validity of the theory that a shortage of investment opportunities causes the downturn; (3) the mutual consistency of the two preceding theories; (4) the validity of Keynes' theory of liquidity preference; and (5) the efficacy of monetary policy compared to fiscal policy.

1. Dr. Warburton has described the following sequence as causing the downturn; monetary deficiency leads to falling prices and *ipso facto* reduced profits and/or the expectation of losses; reduced profits cause the business downturn.[2] In other words, the peak in money supply relative to trend comes first, then the peak in prices, and lastly the peak of the business cycle. In the same article Dr. Warburton has provided statistical data on the quantity and circuit velocity of money with which the sequence can be verified for the period 1919-1945. The actual sequences are shown in Table I. In two cases (the downturns of 1929 and 1937), the sequence is borne out. In the other three cases, the peak in money relative to trend occurred virtually simultaneously with the cyclical peak, so that the sequence is not borne out. Neither is it satisfactorily disproved.

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[1] "Hansen and Fellner on Full Employment Policies," *Am. Econ. Rev.*, Vol. XXXVIII, No. 1 (March, 1948), pp. 128-34; "A Consideration of the Economic and Monetary Theories of J. M. Keynes: Discussion," *Am. Econ. Rev., Proceedings*, Vol. XXXVIII, No. 2 (May, 1948), pp. 293-95; "Quantity and Frequency of Use of Money in the United States, 1919-45," *Jour. Pol. Econ.*, Vol. LIV, No. 5 (Oct., 1946), pp. 436-50.

[2] *Journal Politcal Economy*, October, 1946, p. 443: "Monetary deficiency, either in the virulent form of contraction or in the milder form of absence of growth, is likely—in fact, almost certain—to produce a business depression. The reason for this is the well-known fact that wage rates and other business costs are largely fixed by contract or custom and that their downward revision is a slow and difficult process. A falling price-level therefore reduces business profits by narrowing the margin between the price of a product and its cost of production. The resulting absence of profit, or threatened loss, induces businessmen to reduce their output." In the March *American Economic Review*, Dr. Warburton holds that a rate of growth of the money supply slower than trend has the same effect.

Establishment of the expected statistical sequence is not sufficient to substantiate Dr. Warburton's theory. Even when the central bank has pursued a restrictive policy, as in 1937, it is possible that the slackening in the rate of increase in the money supply was caused by other factors, *e.g.*, the decline in net income-increasing expenditure by governmental units, which began in July, 1936,[3] gives a plausible explanation both of the downturn of 1937 and the antecedent slackening in the rate of growth of the money supply.[4]

From a theoretical point of view, the milder position of Professor

TABLE I.—STATISTICAL TESTING OF DR. WARBURTON'S MONETARY THEORY

Peak in Money Relative to Trend[a]	Peak in Wholesale Prices (BLS)	Peak in Business Cycle[b]
1Q 1920	May 1920	1Q 1920
2Q 1923	Mar. 1923	2Q 1923
2Q 1926[c]	Nov. 1925	3Q 1926
2Q 1928	Sept. 1928	2Q 1929
4Q 1936	Apr. 1937	2Q 1937

[a] Money held by business and individuals including time deposits, taken from Warburton, *Journal Political Economy*, October, 1946, pp. 438–41.

[b] The dates of the cyclical peaks are taken, in accordance with Dr. Warburton's own preferences (*American Economic Review*, March, 1948, p. 130), from Arthur F. Burns and Wesley C. Mitchell, *Mea uring Business Cycles* (New York, 1946), p. 78.

[c] 3Q 1926 shows an increase which is less than trend by only a negligible amount. *Total* quantity of money, however, has a peak in 4Q 1925.

Haberler, who holds that inelasticity of the money supply makes the economy vulnerable to a downturn,[5] seems sounder than the position of Dr. Warburton, who deems it a sufficient cause of the cyclical turning-point. One must be very sympathetic indeed to the monetary approach to consider a rate of increase in the money supply of, say, 3 per cent (as compared to the trend rate of 4.5 per cent) a potent cause of depression.

2. In his comment on Professor Fellner's review of Professor Hansen's *Economic Policy and Full Employment,* Dr. Warburton has proposed an empirical test of the theory of shortage of investment opportunities *vs.* the monetary theory and has issued to Hansen, Fellner and any other interested economist three challenges:

a. To cite a single case [of a cyclical downturn], with supporting factual

[3] Henry H. Villard, *Deficit Spending and the National Income* (New York, 1941), pp. 287 and 293.

[4] Of course, the full story of 1937 is much more complicated.

[5] Gottfried Haberler, *Prosperity and Depression,* 3rd. ed., (Lake Success, 1946), pp. 355-56.

data, which was not preceded by or simultaneous with monetary contraction relative to a reasonable rate of growth;

b. To cite a single case in which the monetary contraction associated with the down-swing was not itself sequential to (*i.e.*, preceded by) specific forces —such as central bank action, other government policies, or gold movements —which exercised a contractive influence on the effective quantity of bank reserves and the volume of bank credit outstanding or a direct contractive action on another important form of circulating medium;

c. To cite a single case, with supporting factual data, in which "idle money," as indicated by a decline in circuit velocity relative to secular trend, preceded monetary contraction at the peak or in the early stage of the down-swing phase of the cycle.[6]

Contrary to Dr. Warburton's impression, failure to meet the three challenges does not damage the theory of inadequate investment opportunities as the origin of depression. With respect to the first and third, savers who are unable to find investment outlets might just as well be expected to repay bank debts (directly or indirectly) as to hold idle money.[7] Moreover, inasmuch as Dr. Warburton has in mind primarily a decline in the money supply relative to a rising trend, it can be pointed out that gradual exhaustion of investment opportunities would be expected to slow down the rate of credit creation by the banks; for new investment both directly and indirectly stimulates the expansion of credit.

With respect to the second challenge, the presence or absence of specific forces having a contractive influence throws little light on the issue. Monetary deficiency in Dr. Warburton's sense could occur without such forces; on the other hand, where they do appear, they need not necessarily result in monetary deficiency.

Nevertheless, the data compiled by Dr. Warburton do provide evidence for one instance of idle money preceding both monetary deficiency and the downturn. In 1926, the peak in circuit velocity relative to trend preceded the peak in money supply relative to trend.[8] The sequence depends on using, in accordance with Dr. Warburton's own preferences,[9] the circuit velocity of the quantity of money held by business and individuals rather than the velocity of the total quantity of money. The total quantity of money gives no evidence of idleness prior to contraction.

[6] *American Economic Review*, March, 1948, p. 131.

[7] None of the references cited by Dr. Warburton contains any statement by Professor Hansen that idle money precedes either the downturn or monetary deficiency, nor do I know of any such statement by Professor Hansen.

[8] *Journal Political Economy*, October, 1946, p. 439.

[9] *Ibid.*, p. 447.

3. Dr. Warburton's presentation gives us a simple choice between two theories: the facts can support one or the other but not both. Actually, however, the facts can be (and usually are) consistent with both theories. It is this that makes it difficult in any given case to choose among alternative explanations for the downturn, and the statistical testing of business cycle theories is therefore apt to be unrewarding. Moreover, aside from the problem of interpreting events in any actual downturn, even in principle we may not be faced with a clearcut choice. We can, to be sure, say that the monetary explanation is correct if we know that a more elastic money supply would have indefinitely postponed the downturn whereas no increase in investment opportunities would have avoided it given the actual status of the money supply. Likewise, we can accept the exhaustion-of-investment-opportunities theory if we know that more investment opportunities would have avoided the downturn whereas no increase in the elasticity of the money supply would have done so. But it is possible that neither greater elasticity of the money supply alone nor more investment opportunities alone would have avoided the downturn. An eclectic can plausibly maintain, *e.g.*, that in 1929 (see below) the shortage of investment opportunities made a downturn inevitable but that an easier credit policy might have postponed it.

4. The preceding comments have concerned the cyclical downturn. Dr. Warburton's discussion of Keynes at the 1947 annual meeting of the American Economic Association by implication had to do with the expansion and contraction phases of the cycle. Dr. Warburton attempted to use the well-known fact that both the quantity of money and its velocity increase in the upswing and decrease in the downswing to disprove Keynes' theory that an increase in the money supply reduces velocity by bringing down the interest rate.[10]

In a similar vein, Dr. Warburton has criticized Professor Hansen

[10] *American Economic Review*, May 1948, pp. 294-95: "In Keynesian theory, changes in circuit velocity of money are positively correlated with changes in the rate of interest, and changes in the rate of interest are negatively correlated with changes in the quantity of money. This means that changes in circuit velocity are negatively correlated with changes in the quantity of money, that is, *V* and *M* are compensatory, with additional supplies of money becoming 'idle' money. This contrasts directly with pre-Keynesian theory, according to which monetary expansion in excess of a normal rate of growth is accompanied, with some lag, by higher monetary velocity, and monetary contraction by hesitancy in the use of money; that is, changes in *V* were regarded by pre-Keynesian economists as a force accentuating rather than compensating the effects of changes in *M*.

". . . Our study [at the Federal Deposit Insurance Corporation] has covered the period since 1918. The facts, we find, are in conformity with pre-Keynesian theory. The liquidity preference phase of Keynesian theory is not in accord with the facts, and appears to be irreconcilable with them."

Dr. Warburton does not give the statistics supporting his generalization.

for saying that there was a vast increase of money between 1934 and 1937 and that velocity was low.[11] According to Dr. Warburton, "From the low in 1933 to the high in 1937 the quantity of money increased relative to trend by less than 10 per cent, circuit velocity by more than 30 per cent. In terms of contribution to recovery—that is, to stimulation of sales at more than a normal rate of growth—the rising circuit velocity was more than three times as potent as the increase in the quantity of money."[12]

Dr. Warburton's position is open to criticism on two counts. First, on account of the usual *ceteris paribus* procedure in economic analysis, the liquidity preference doctrine cannot be discredited by a showing that historically increases in the quantity of money have been accompanied by increases in velocity. The essential question is, would not velocity have been higher in the period 1934-37, *e.g.*, other things being equal, had the money supply been smaller? No simple statistical analysis can answer the question. It may be that Dr. Warburton's investigations are more complicated than his comments at the annual meeting indicate, but it is doubtful if a complicated analysis would not be open to so much dispute that it could do little to settle the argument. Keynesians will remain convinced that federal deficits provided the driving force behind the expansion of 1934-37; that the increased velocity resulted from the rising levels of activity so generated; and that the chief effect of the increased money supply was to prevent velocity from increasing as much as it otherwise would.

Second, Dr. Warburton's statistical procedure is open to question. His figures indicate a relatively large increase in velocity and a small increase in money primarily because he removes trend. His trends, which are straight lines, apparently are based on the period 1919-29 and are projected into the period 1930-45.[13] It is true that the trend for velocity gives a good fit to the actual data for the later period, but Dr. Warburton's assumption that the same forces which produced a straight-line downward trend in the 'twenties continued to operate at the same rate in the 'thirties is dubious. It can equally well be assumed that the principal force making for a downward trend in velocity in the period 1919-29 was a rise in per capita real income;[14] as real

[11] Alvin H. Hansen, *Economic Policy and Full Employment* (New York, 1947), pp. 224-25.

[12] *American Economic Review*, March, 1948, p. 133. Dr. Warburton's statistics, which compare the low of 1933 with the high of 1937, are a bit unfair to Professor Hansen, whose statement referred only to the period 1934-37. Thus Dr. Warburton introduces into his figures the sharp rise in velocity between the 1st and 2nd quarters of 1933.

[13] *Journal Political Economy*, October, 1946, p. 447.

[14] This is, in fact, Dr. Warburton's own opinion (*ibid.*, p. 443).

income per capita even in 1937 did not regain the 1929 level, it would be expected that the downward trend would be mitigated; and therefore the velocity in the period 1934-37 was low.

The trend for quantity of money, when projected into the 'thirties, does not give a good fit at all. Even if it did, one could still maintain that the forces producing the upward trend in the 'twenties—population growth, increased productivity per capita, and the forces increasing the ratio of cash holdings to expenditures[15]—were not operating nearly as strongly in the 'thirties. Therefore, the fact that there was more money and less money-income in 1937 than in 1929 indicates a large growth in the money supply.

Moreover, it seems to me (though Dr. Warburton will doubtless disagree) that the true state of the money supply in those years cannot be measured by the quantity of money alone. The large growth of member bank excess reserves and the low rates of interest show that the quantity of money could have been much larger. Hence, for purposes of the present problem, Dr. Warburton's statistics understate the money supply and overstate its velocity. Some fraction (or multiple) of the excess reserves could be regarded as idle money.

5. Concerning policy, Dr. Warburton says, "A compensatory fiscal policy, carried out in a manner producing appropriate effects on the quantity of money, may be an antidote to a dose of improper monetary policy; but with proper monetary policy exercised through ordinary central bank operations, an antidote will not be required."[16]

As the arguments for and against the effectiveness of monetary policy have occupied a large part of the literature of the last twenty years, it would not be profitable to review them here, but two observations may be made. First, most economists would blame the downturns of 1920 and 1937 more on fiscal policy than on monetary policy. In both cases the balancing or overbalancing of the federal budget was a major factor. Second, the extreme form in which Dr. Warburton has stated his position appears to be untenable. He gives the appearance of believing that cyclical downturns can be avoided simply by pursuing an easy money policy. If this be a misinterpretation, it is one to which his remarks are open and should be corrected.

The experience of 1920 and 1929 shows that continuance of easy money would probably have been just as disastrous, if not more so, than the restrictive policies actually adopted. Easy credit might have permitted the inventory boom of 1919-20 to continue a while longer, but it is not likely that a smooth transition to a slow rate of inventory

[15] *Ibid.*, p. 444.

[16] *American Economic Review*, March, 1948, p. 134.

accumulation could have been effected, especially in the face of the decline in export markets. The first evidence of coming deterioration of the price level would (and did) end new investment in inventories and initiate cyclical contraction. In 1929, credit expansion could have helped business only at the cost of furthering the stock market boom and making the crash so much the worse. Conversion of paper profits into realized losses as brokers demanded more margin was bound to have serious effects on both consumption and investment. In boom times monetary policy is up against the familiar dilemma that action to curb excesses containing the seeds of depression may fatally injure legitimate business. In such cases, "ordinary central bank operations" —to use Dr. Warburton's phrase—are insufficient.

THE LEARNED HANDMAIDENS OF AMERICAN CAPITAL

A Survey of Literature*

By A. AYZENSHTADT

Translator's Preface

The United States and its economists have become quite a popular subject in the Soviet economic literature since the end of the war. A number of books have been published (particularly by the former Institute of World Economy and World Politics), and hardly a journal issue comes out without at least one article devoted to economic conditions and economic thinking in the United States. A study of these writings offers the American economist the unique pleasure of seeing himself and his environment in a peculiar mirror, though the images, to put it mildly, may often cause surprise; it also gives him valuable information both for the understanding of the Soviet Union and for the understanding of himself.

The article translated here appeared in the July-August (No. 4) 1947 issue of the Soviet journal *Planned Economy* (*Planovoye Khozyaystvo*), which is published bi-monthly by the State Planning Commission (Gosplan). It was selected for translation because of its interest: in a rather short space, the author covers some of the most important ideas discussed in Western economic literature in the works of Schumpeter, Hansen, Keynes, Ezekiel and others. The interpretation of these ideas by a Soviet economist is most instructive. But I hope the reader will avoid the error so often made by Soviet economists in regard to our own literature, that is, of treating this article as *the* official pronouncement on the subjects covered. Though the range of economic opinion in the Soviet Union is much more narrow than in the United States, differences as witnessed by sharp debates (such as the Varga discussion) do exist. Mr. Ayzenshtadt's essay is not unrepresentative, though possibly it is more imaginative than the average. Yet I earnestly hope that the reader will abstain from generalizing too readily about Soviet economic literature on the basis of this *one* paper. Translations of Soviet economic works are beginning to appear; perhaps this article will be followed by others. There will be plenty of time for generalizations.

A few remarks about Soviet economic periodicals may help to set this paper in its proper perspective. The so-called professional journals in this country are essentially written by economists for economists. The Soviet economic periodicals, on the other hand, concentrate not so much on the development of economic science as such, but rather on the interpretation, with a definite political objective, of economic and statistical information for a more general audience. In his interpretation of economic facts and ideas, the Soviet economist is not supposed to treat his material with impartiality and objectivity; the latter word has acquired an invective meaning in the Soviet Union. His rôle is that of an intellectual crusader, actively engaged in the building of socialism at home and in combating its opponents ("unveiling" is the favorite term) abroad. Yet an economist cannot help being a scientist,

* Translated by Evsey D. Domar, associate professor of economics, The Johns Hopkins University.

at least to some extent, and the conflict between the two rôles—crusader and scientist—has been sharp. The recent denunciations of so many books on economics and statistics (also on philosophy, history, and biology) published in the Soviet Union since the war, show that the conflict is far from being resolved. The present paper, however, does not appear to bear any marks of this conflict.

Since the subject matter of Mr. Ayzenshtadt's paper is rather controversial, I endeavored to steer as close to the original as I could. To replace the author's translations of English passages, I tried to use the originals, rather than to re-translate them into English whenever his translations were reasonably close to the originals and a proper reference was given or could be easily found. In other cases the techniques used were stated in the footnotes.

When a translator, who happens to be an economist himself, works on a paper like the present one, there is an urge (for reasons which will presently become obvious) to start an argument with the author. I felt, however, that such an attempt on my part would destroy the unity of the article and spoil the fun for the reader, who might like to do it on his own. Therefore my notes were limited to a few easily ascertainable and trivial points. For the rest, let the article speak for itself.

E.D.D.

The present state of thought among bourgeois economists is a reflection of the conditions in which the bourgeoisie finds itself in the era of the general crisis of capitalism, when due to the Second World War, capitalist contradictions have become particularly acute. More and more frequently, "investigations" of bourgeois economists are aimed at finding ways of overcoming these contradictions and of averting crises, in order to save capitalism from its imminent destruction. All these investigations exhibit the complete bankruptcy of the bourgeois economic "science," its inability to understand the real contradictions of the capitalist society, and the hopelessness of the bourgeois economic prescriptions for rescuing capitalism. The vulgar, apologetic meaning of all these theoretical constructions acquires an ever stronger reactionary character;[1] it demonstrates the irrefutable fact that the contemporary bourgeois political economist is merely the learned handmaiden of monopolistic capital who is assigned the task of constructing "scientific" foundations for the capitalist reactionary policies against the working class, and for the capitalist-imperialist expansionist aspirations.

And if some contemporary bourgeois economists speak about the contradictions and instability of the capitalist economic system, they do so only because these contradictions are already so obvious that they can no longer be concealed. Their admissions are significant only to the extent that they bear witness to the bankruptcy of the bourgeois political economy which can deny no longer the crying contradictions of capitalism, the harmony of which it had extolled over many decades. But these same economists firmly cling to their reactionary positions and insist on the retention of capitalism as such, and of the system of enslavement and oppression of the toiling masses based on it. Those who dare to mention the question of capitalist contradictions

[1] Translator's note: The word "vulgar" is evidently used here as it was used by Marx, in the sense of popular, superficial, shallow.

make every effort to minimize them; and in particular they avoid using the word "crisis."

One of these authors is an American professor, Benjamin Higgins. Here is what he says:

> Our economy at war's end may be likened to an acrobat performing on a very thin wire called "economic stability." On one side yawns the Abyss of Depression, on the other roars the Volcano of Inflation. The performer is blindfolded, his faltering footsteps guided by shouts from a crowd of professional economists, legislators, and voters who together formulate economic policy. The acrobat is hampered in his movements by the long pole in his hands, weighted at one end with "excess purchasing power" and at the other with "excess saving," which he raises and lowers in response to the cries that are loudest. After the last war, our acrobat seemed in danger of falling into the Abyss, gave more weight to "purchasing power" and fell into the inflationary volcano instead; subsequently plunged into the Abyss in an attempt to compensate, rebounded, maintained his equilibrium for a few years, but, his strength meanwhile giving out, he collapsed into the Abyss in 1929 and only *a strong draft of "major war" revived him.*[2]

Higgins does his best to avoid using the term "crisis," replacing it by the concept of a "depression." This is a favorite method of bourgeois economists, in their attempt to eliminate crises from the analysis of the capitalist cycle. At the same time, Higgins finds the causes of this "depression" in a superficial relation between "excess purchasing power" and "excessive savings," thus completely avoiding the question of class contradictions in the bourgeois society.

Other bourgeois economists echo Higgins. Thus Leon Henderson writes in his report on "Enterprise in Postwar America":

> There are several targets that are set. There is one target which ought to be in front of us all the time, and that is the target of the disaster of the thirties; the stagnation and our failure to find a way out of our difficulties. No matter what our status is, no matter what we are in the way of policy maker or policy receiver, we should be constantly thinking of how ashamed we should be that it took a war and seven and a half billion dollars per month of spending before we could have full employment. That is a target anybody can shoot at.[3]

Thus these "strong words," like "shame," "targets," etc., are used only to emphasize the author's desire to defend from fire the unmasked "target" of capitalism.

* * *

[2] Benjamin Higgins, "Public Work and Our Postwar Economy," *Postwar Goals and Economic Reconstruction. Addresses Delivered at the Second Series of Conferences of the Institute on Postwar Reconstruction* (New York University, 1944), p. 73.

Translator's note: The italics in the text are Mr. Ayzenshtadt's.

[3] Leon Henderson, "Enterprise in Postwar America," *Postwar Goals and Economic Reconstruction* (New York University, 1944), pp. 16-17.

Translator's note: Mr. Ayzenshtadt's translation of this passage was rather free and made it considerably stronger than the original.

Notwithstanding the fact that some bourgeois economists describe capitalist contradictions more or less frankly, they still hold on to their capitalist positions and make every effort to solve the insoluble problem: how to overcome these contradictions within the framework of the capitalist system. Moving in this magic circle, many of them invariably arrive at reactionary conclusions in which the apologetic character of the bourgeois economic thought clearly manifests itself.

Particular attention is devoted by bourgeois economists to find ways of "curing" capitalism of its crises. The *Readings in Business Cycle Theory*, published by the American Economic Association in 1946, is very significant in this respect.[4] The problems of employment and of crises occupy the center of the stage. The authors are American followers of Keynes.[5] Their aim, to use their own expression, is to "iron out" the industrial cycles, or at least to mitigate them.

"The business cycle was *par excellence* the problem of the nineteenth century," says A. Hansen. "But the main problem of our times, and particularly in the United States, is the problem of full employment" (p. 370). The two problems are indissolubly connected. If industrial development took the form of a continuous stream, says Hansen, the problem of "full employment," would be settled once and for all. The sizeable volume of 494 pages, composed by Hansen and his associates, is devoted to an effort, which—as one should have expected—proves to be completely fruitless.

The essays composing the volume were written during the period 1923 to 1941, and thus cover three cyclical crises: 1921, 1929 and 1937. (The book itself came out in August, 1946.)

Of the twenty-one essays, only three are directly concerned with the theory of crises. The others analyse Keynes' theory about a "planned" state capitalism and full employment as "universal measures" against crises.[6]

The first three essays are reprints of older articles. They try to propagandize the bourgeois apologetic theory of "long cycles," a theory discredited in the USSR a long time ago.

The reader is aware that this notorious theory of "long cycles" represents an attempt on the part of the outrageous defenders of capitalism to "refute" the irrefutable fact that capitalism develops through periodic crises of overproduction which repeat themselves every seven to ten years.[7]

It is for the specific purpose of describing capitalist development as a process deprived of the inevitable capitalist crises, that American economists

[4] Translator's note: The volume was published in 1944. The author evidently had a copy printed in August 1946.

[5] Translator's note: Some of the authors, such as Schumpeter, Kondratieff, or Haberler might decline this honor. Of the twenty authors, at least six could not be possibly classified as American. Of the remaining fourteen, as far as I know, only seven are ***not*** of foreign background.

[6] Translator's note: Eight essays are not concerned with Keynes, seven of them having been published before 1936.

[7] Translator's note: The theory in question belongs to Nikolai D. Kondratieff, a Russian economist whose name should undoubtedly be familiar to Mr. Ayzenshtadt.

have found it necessary to rescue from oblivion the "long cycles," in which the true cyclical character of capitalist development is "straightened out" and dissolved.

It is quite significant that we find the German economist Joseph Schumpeter, who is now doing such great things at Harvard University, in the role of the newly ordained preacher of this apologetic theory of "long cycles." Not satisfied with the "scheme of three cycles" (long, medium and short), Schumpeter, in his paper "The Analysis of Economic Change," invents still another one—the "theory" of "secondary cycles." The real purpose for which these "secondary cycles" are invented is the same as for the "long" ones: to conceal the true cycles which are connected with the crises. Economic life is thus transformed into an uninterrupted flow of small oscillations, a continuous vibrating movement without such shocks as crises. Schumpeter considers it possible, with foreign markets and Free Trade, to "iron out" the crises in the United States, which, according to his own admission, take a much more violent form than those in England.

Another author, Hans Neisser, who found refuge at the University of Pennsylvania, revives Say's Law regarding the impossibility of general overproduction. ". . . Say's contention of the impossibility of general overproduction," says Neisser. "seemed contradicted by the recurring experiences of severe crises" (p. 385).

Neisser, however, easily removes this contradiction by postulating the possibility of partial overproduction in both the spheres—of the production of consumer goods and of the production of means of production. He finds the remedy to this situation in foreign markets. In terms of concrete policy, this means that American imperialism can escape crises by conquering an ever larger number of foreign markets.

* * *

The central figure of the volume is Keynes. Eighteen papers are devoted to the analysis of his theory. The whole discussion is concentrated around his name.

What is the explanation of the influence that he exerted on world bourgeois economic thought, and particularly on American economists and American economic policy during the war? The explanation lies in the fact that Keynes' vulgar theory of the stimulating effects of investment leads to the conclusion that the cost of the increased investment should be borne by the working class. Keynes transformed economic theory into a powerful weapon of economic policy to be used by the bourgeois state against the toiling masses.

His point of departure is the presence of large unemployment, which is characteristic of the period of the general crisis of capitalism. His central idea is that the level of employment depends not on the conditions of capitalist production, but on the accumulation of money capital and on the magnitude of investment. All of Keynes' flimsy arguments ignore the process of capitalist production as such; attention is concentrated on the process of circulation only. This is the reason why Keynes' whole analysis has such a superficial, vulgar character.

Marx had foreseen the possibility that superficial bourgeois economic thought would suffer from such an optical illusion. Analysing the process of reproduction and circulation of total social capital Marx wrote that money capital "is the form in which every individual capital appears upon the scene and opens its process as capital. It therefore appears as the prime promoter, giving the first impetus to the entire process."[8]

Still more strongly does Marx reprove this sort of nearsightedness on the part of bourgeois political economy in his chapter on "The General Law of Capitalist Accumulation": "The superficiality of Political Economy shows itself in the fact that it looks upon the expansion and contraction of credit, which is a mere symptom of the periodic changes of the industrial cycle, as their cause."[9]

Even the greatest admirers of Keynes and of his theory that loan capital is the main propeller of the industrial cycle, do not see anything new in it. "As most theories of business fluctuations, in their explanation of changes in employment, concentrate attention on changes in the volume of investment, Keynes' emphasis on this latter point is not new."[10]

Keynes himself thinks that the "novelty" of his system lies in the equilibrium formula of the economic process, in which the independent and dependent variables are arranged as follows:

Independent variables

1. Propensity to consume
2. Marginal efficiency (profitably) of capital
3. Rate of interest
4. Liquidity preference

Dependent variables

1. Saving
2. Investment
3. Level of employment

When the marginal efficiency of capital is low, the capitalist prefers to hold his wealth in liquid form rather than to invest it. Enter the worker, who tightens his belt, abstains from his propensity to consume, and accumulates his savings. As a result, money, and hence loan, capital increase, the interest rate falls, the cost of credit slides down almost to zero; now investment goes up and so does employment. Thus the worker himself has provided the funds for his own exploitation. Having rendered the surplus value to the capitalist once before, he now takes off an additional portion of his wages to invest it in production.

Thus the "curbing of the propensity to consume" applies not to all social

[8] K. Marx, *Capital*, Vol. II (1936 ed.), Chap. XVIII, p. 306. Translator's note: In the American Kerr edition, this quotation appears on p. 408.

[9] K. Marx, *Capital*, Vol. I (1936 ed.), Chap. XXIII, p. 540. Translator's note: In the Kerr edition, this quotation appears in Chapter XXV, p. 695.

[10] Bertil Ohlin, "Some Notes on the Stockholm Theory of Savings and Investments," *Readings in Business Cycle Theory* (Philadelphia, 1946), p. 125.

classes, but to workers only. The formula for the increment of income is constructed by Keynes in the following manner: increment of income = increment of consumption + increment of investment.

Income, consumption and investment are expressed by Keynes in wage units. A wage unit is the payment for a unit of labor, for an hour of common (unskilled) labor. The payment for an hour of this labor is the wage unit used by Keynes as a common denominator. Keynes expresses not only the income of workers, but that of capitalists as well in terms of this unit; thus he is able to misrepresent the real essence of class relations in a capitalist society.

The increment of saving is also expressed in terms of this "wage unit." In general, Keynes defines saving as the difference between income earned during a certain period and consumption of the same period.

The main purpose of all this theorizing is to find a method for curbing the "propensity to consume" of the working class. With this aim in mind, Keynes introduces a new concept—the "investment multiplier" showing that as saving and investment increase, income rises at a faster rate than investment.

It is this situation that is supposed to induce the worker to part with his savings.

Keynes' theory is constructed as a special equilibrium system which does not allow for sudden explosive crises. Keynes asserts its universality and its continuous effectiveness throughout the whole period of the existence of capitalism.

The system is peculiar in the sense that its equilibrium depends on factors which are very unstable by themselves. Besides the objective factors—the rate of interest and the marginal efficiency of capital (*i.e.*, that profit level below which the bourgeois does not wish to descend)—two subjective or psychological factors are operating as well: the liquidity preference and the propensity to consume. The former means that the capitalist prefers to hold on to his money, because he fears risking it in investment; the latter, that the worker must combat his propensity to consume in order to throw his money into production. Both are factors not easily determined and regulated.

Keynes, though regarding himself a "great revolutionary," admits with perfect frankness that his theory aims at preservation of capitalism. ". . . The foregoing theory is moderately conservative in its implications. For whilst it indicates the vital importance of establishing certain central controls in matters which are now left in the main to individual initiative, there are wide fields of activity which are unaffected," says Keynes in the chapter on the social philosophy to which his "General Theory" might lead.[11]

According to Keynes, the regulatory activity of the bourgeois state should first of all extend control over saving, and secondly, it should "socialize investment."

[11] J. M. Keynes, *The General Theory of Employment, Interest and Money* (New York, 1936), Chap. 29, "Social Philosophy towards which the General Theory might lead," p. 377.

But the phrase "socialize investment" is just empty chatter, since Keynes defends the inviolability of private ownership in the means of production.

> . . . It is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary (p. 374).[12]

That the state should be used as the weapon for forcing a reduction in the consumption of the toiling masses, and for guarding capitalists' profits is the real meaning of all of Keynes' "social philosophy" and all his so-called "socialization of investment."

During the war, Keynes came into the open. In his pamphlet *How to Pay for the War* he directly and frankly posed the question not as "how" to pay, but as "who" shall pay. He further stated that the rich could not pay. It is clear then that the working class must pay. A whole chapter was devoted by Keynes to this question.

His plan contains the famous theory of compulsory saving, which was carried into effect not only in England, but also in Canada and in the United States. A direct quotation will show how Keynes justifies the necessity of financing the war at the expense of the workers:

> . . . It is not sane to suppose that the war can be financed without putting some burden on the increased war incomes of the class with £5 a week or less. . . . The incomes of this group will have increased on the average by some 15 per cent as a result of the war. Is it seriously expected that those with less than £5 a week will be allowed to increase their average consumption by 15 per cent, while those with more than £5 (for example with £1 million—A.A.) a week will be left on the average with only a quarter of their incomes to consume?[13]

Keynes' plan is an offensive against the standard of living of the working class. It is a bourgeois program which strives to burden the working class with the whole weight of the costs and losses of the war and of the crises.

* * *

The leader of American Keynesians is Alvin Hansen. We should note, however, this difference: for Keynes, the movements of saving and investment are secondary factors, the primary ones being the "propensity to consume," and the "liquidity preference"—both purely psychological. For Hansen, on the other hand, it is the periodic accumulation and exhaustion of loan capital that is the cause of the fluctuations of the industrial cycle.

Hansen's main proposition is that full employment and the maximum level of income that can be achieved in a contemporary private enterprise economy, are impossible without a sufficient volume of investment—sufficient, that is,

[12] Translator's note: I found this passage on p. 378.

[13] J. M. Keynes, *How to Pay for the War, A Radical Plan for the Chancellor of the Exchequer* (London, 1940), Chap. IV, "Can the Rich Pay for the War?", pp. 25-26.

to fill the gap between consumer expenditures and that level of income which a full utilization of all factors of production can produce.[14]

To raise the effective demand (purchasing power) through increased investment and thus to achieve full employment—this is Hansen's program, echoing Keynes word for word.

Compensatory action against cyclical fluctuations should be undertaken by the state budget in the form of "deficit financing." This paradoxical and absurd conception of the sources of funds has earned a prominent position in American economic literature. Hansen has developed his theory of deficit financing, *i.e.*, of an enormous growth of the public debt, at considerable length in a number of pamphlets published while he was a member of the National Resources Planning Board.

In a pamphlet entitled "After the Defense—What?", Hansen develops the idea that a continuously growing public debt allegedly creates full employment and prosperity.[15] Financial costs can be disregarded, because, if maximum production and full employment can actually be achieved, the rise in production will pay for the needed expenditures: "doing the job pays the bill." In other words, it is not a question of money, but of manpower, material resources and organization. Hansen is confident that a full realization of the productive potential in a capitalist society is possible; therefore the government should engage in ever larger expenditures to stimulate production. He is also confident that "every cent expended, public or private, becomes income for the members of our society. This conception apparently explains," says Hansen's critic Moulton, "the statement of the National Resources Planning Board that costs are of no significance, that 'doing the job pays the bill.' Since the receipts are necessarily identical with the disbursements everything is satisfactory: cost equals income; and income equals cost."[16]

Here Hansen revives the erroneous notion of Adam Smith identifying total social product with national income, a notion long since discredited. Identifying production with income, Hansen seeks to solve the problem of crises by public investment and an unlimited growth of the public debt. To replace the expression "treasury deficit covered by borrowing," which would reveal the essence of his budgetary policy, Hansen has coined a vague but well-sounding term "net income-creating expenditures."

The "novelty" of Hansen's theory simply is that debts need not be paid. In other words, this is a "theory" of state bankruptcy raised to the level of a system. In an article published in *Fortune* in November 1942, Hansen tries to show that the public debt is not really a debt.

[14] Alvin H. Hansen, "Economic Progress and Declining Population Growth," *Readings in Business Cycle Theory* (Philadelphia, 1946).

[15] Translator's note: This pamphlet was published by the National Resources Planning Board in 1941. It does not bear Hansen's name and I understand from him that he did not write it. Perhaps the author referred to another pamphlet—*After the War—Full Employment*, which was published under Hansen's name in 1942.

[16] Harold G. Moulton, *The New Philosophy of Public Debt* (The Brookings Institution, 1943), p. 60.

This means that mutual credits of capitalists must be honored, but the state need not repay its debts to the people. Thus the public debt becomes simply an instrument of the burgeois state for robbing the toiling masses. This is the class essence of this new-fangled "theory" of the unreality of the public debt.

Naturally, this "theory" of the public debt has found followers who have carried it to absurdity. Thus, Professor Seymour Harris writes:

> . . . A public debt of $4,000 billion was compatible with the maintenance of the capitalist system. . . . It is conceivable that a debt of these proportions could be accumulated over a period of 50 to 60 years, without the emergence of a serious inflation. . . . The major part of the debt would be financed out of savings, not out of the creation of further new debt.[17]

The achievement of the astronomical figure of 4,000 billion dollars (the war debt did not exceed 258 billions) appears to Harris to be possible within the capitalist system, since a method has now been found for "overcoming" the crises in the growth of the public debt itself.

This approach is not at all new. It had been tried before. Let us recollect what Marx had to say about Pitt's financial policy:

> The idea of capital as a self-reproducing and thereby self-expanding value, lasting and growing eternally by virtue of its inherent power . . . has led to the fabulous fancies of Dr. Price, which far outdo the fantasies of the alchemists; fancies, in which Pitt seriously believed and which he used as pillars of his financial administration in his laws concerning the sinking fund.[18]

Under the pressure of military necessity, the American government had to find salvation in an ever-growing public debt, just as Pitt did in his time. It is impossible, however, not to be amused at the philosophising of Hansen and Harris which exactly repeats, after 150 years, the fantastic fabrications of Dr. Price.

It is true, nevertheless, that Hansen realizes all the inconvenience of debt repudiation, particularly for a country as wealthy as the United States. He has therefore come up with a new variety of compensatory policy, this time not based on borrowing.

This policy seeks to solve the crisis problem by adjusting the government budget to business fluctuations. During prosperity, the government should accumulate a surplus, and then spend it when depression comes. The application of this policy Hansen prudently restricts to state and local governments; they are the ones to set up reserves in anticipation of a crisis.

This theory has had considerably less success than the "new philosophy

[17] Seymour E. Harris, *The Economics of America at War* (Harvard University, 1943), pp. 383-84.

Translator's note: The last sentence was translated by Mr. Ayzenshtadt as follows: "The major part of this debt can be covered by savings without a repayment of previous debts at the expense of new ones." The book was published by W. W. Norton & Co., Inc.

[18] K. Marx, *Capital*, Vol. III, Part I (1932 ed.), p. 279. Translator's note: In the Kerr edition, this quotation appears in Vol. III, Part V, pp. 463-64.

of the public debt" for two reasons: (1) state governments have deficits anyhow, and local governments have to borrow frequently; (2) attempts to induce workers to set up surpluses in the budgets of their local governments, over and above compulsory savings, cannot be successful; as for the propertied classes, they have protected themselves with the "liquidity preference."

Professor Benjamin Higgins, quoted above, writes that 38 states have created "planning boards for post-war public works." But not a single state set up the needed reserves. Projects worth 18 billion dollars have been submitted to the Federal Works Agency, which in turn distributed them among its regional offices. "They are reposing there gathering dust."

This is just one of the numerous manifestations of the helplessness of the bourgeois economic science, and of the inability of capitalism to engage in economic planning.

* * *

The volume *Readings in Business Cycle Theory* ends with Ezekiel's paper under the significant title of "The Cobweb Theorem."

In essence, this is a discussion of the chronic world agricultural crisis which accompanies the general crisis of capitalism. Ezekiel, however, bypasses this problem. He narrows down his topic to a study of "laws of commodity price movements which are subject to their own fluctuations, independent of the general industrial cycle. Such are prices of agricultural products."[19]

These prices, following laws of their own, are established, according to Ezekiel, at the exact point of intersection of demand and supply. Numerous diagrams illustrate the formation of prices of bacon, corn, but particularly of hogs; the last case is furnished with a lengthy bibliographical list of the works of German economists who preceded Ezekiel. The theory of price determination as a result of interaction between supply and demand belongs to Marshall, whose student Ezekiel is.

Ezekiel calls his diagram the "Cobweb Theorem," because the intersecting curves of supply and demand create a pattern similar to a cobweb.[20] Establishing his "hog prices prognosis" in this manner, Ezekiel adds, to all preceding psychological and mathematical theories, one more fantastic explanation of reality, this time in the garb of a cobweb.

We may say that this "Cobweb Theorem" is, in a sense, a symbol uniting all theoretical models of the *Readings in Buisness Cycle Theory*. This theorem beautifully characterizes the complete theoretical helplessness of the bourgeois economics, its complete inability and unwillingness to find a scientific explanation of those basic contradictions in which capitalism is enmeshed.

All these constructions are cobwebs which fly to bits as soon as they are touched by scientific critique. And yet, the cobweb is being continuously

[19] Translator's note: I re-translated this quotation into English. No page was given, and I could not find the corresponding passage in Ezekiel's paper.

[20] M. Ezekiel, "The Cobweb Theorem," *Readings in Business Cycle Theory* (Philadelphia-Toronto, 1946), p. 422.

re-created, because inside of it there is a live beast—the spider—monopolistic capital.

The tragedy of the situation is realized by the author of the "Cobweb Theorem" himself. He concludes his essay with these words:

> The cobweb cycles (not to any lesser degree than other fluctuations analyzed by Keynes) prevent the system from reaching its most effective utilization of resources.
>
> The contemporary system is not an automatic self-regulating mechanism, which can provide full utilization of resources. Unemployment, excess capacity and wasteful use of resources—these are its constant companions.[21]

Thus does the bourgeois economic thought, attempting to solve the "full employment" problem, confess to the hopelessness of its theoretical constructions. And yet, over one-sixth of the globe, the problem of full employment, which the bourgeois economists are hopelessly tackling, has long since stopped worrying man's mind. Here the solution is re-enforced in the words carved in granite of the 118th section of the Stalin Constitution: "The right to work is guaranteed by the socialist organization of the people's economy, by the inevitable growth of the productive forces of the Soviet Society, by the elimination of economic crises and by the liquidation of unemployment."

* * *

In their quest for ways of preventing crises, contemporary bourgeois economists do not stop at internal measures only. Exceptionally high hopes are reposed in the imperialistic expansion of monopolistic capital. The intensification of the expansionist policy of American imperialism after the second World War and its drive for world domination are reflected not only in the notorious "Truman Doctrine" and "Marshall Plan," but in the theoretical constructions of American economists as well.

Two books, published simultaneously under nearly identical titles are significant in this respect. The first—*American's Place in the World Economy*—belongs to the New York University Institute on Post-war Reconstruction; the second—*America's Role in the World Economy*—was written by Alvin Hansen, with whom we are already familiar. Hansen's book is mostly concerned with the accumulation of money capital in the United States, and with the possibility of transforming it into real capital by means of capital exports. The New York University volume is mainly devoted to the second part of the problem—capital exports and their prospects.

Clarence Senior (the expert on "Pan-American" economics) states the problem very categorically:

> We are doubly armed for the penetration of other countries. First of all our role as suppliers of machinery and technique is facilitated by the fact

[21] Translator's note: Ezekiel does not conclude his essay in this manner. Several sentences can be found on his last page (p. 442) which, when put together, approximately yield this quotation. The last five words are an exception. As far as I can tell, their authorship belongs solely to Mr. Ayzenshtadt. It seems to me that this conglomeration of sentences with a new ending has produced a stronger and different effect than the one intended by Ezekiel.

that after the war we will have about half of the productive capacity of the world, plus outstanding institutions for technological training. Secondly, we are equipped to play our role as investor by the possession of more than half (more correctly 3/5, *i.e.*, 21 billions out of a total of 35) of the world supply of gold; plus a tremendous capacity for capital formation. In the early postwar years, most of Latin America will not need government loans; but long-range development projects are needed and are being planned in all of the countries to the South.[22]

A wide field for the utilization of American capital and for the strengthening of American claims to world domination is found by Morgan Lewis in his proposed construction of a transcontinental railroad, crossing the whole American continent and connecting United States with Central and South America. This transcontinental railroad, nine thousand miles long, is aimed at the "acquisition of natural resources of the wealthiest countries of South America. It will be inconvenient, of course, to finance this line by United States government appropriations; it should be therefore financed by private investments"—and thus create ample scope of action for United States monopolies.[23]

The scope of Lewis' imperialistic ambitions is very broad indeed. To recover the cost of the construction of this railroad, he suggests the following operation: Large, uninhabited areas in South America, which according to his estimates, stretch for hundreds of square miles, will be purchased and then re-sold at a profit (their prices having been sharply raised by the railroad). This operation, undertaken by United States capital, should cover all the costs of this great expansionary plan in South America, and leave a handsome profit besides.[24]

Hansen approaches the problem somewhat differently. First of all he establishes the fact that the 21 billion dollars worth of gold "sterilized" and buried in the basements of Fort Knox[25] is unprofitable by itself, while its

[22] Clarence Senior, "A Realistic Approach to Postwar Cooperation," *America's Place in the World Economy* (New York University, 1945), p. 244.

Translator's note: I re-translated the quotation trying to use as many of Mr. Senior's original sentences as I could find. The statement as a whole does not appear on p. 244. There are scattered sentences on pp. 243-44 conveying approximately the same idea.

[23] Morgan J. Lewis, *Key to a New America* (American Progress Association, Philadelphia, 1941), p. 11. Translator's note: See Note 24.

[24] Translator's note: Page 11 of Lewis' book does not contain the quotation referred to in note 23. The railroad uniting the Americas is discussed in Chapter XIV, pp. 89-99. The nearest quotations I could find on the two questions touched upon by Mr. Ayzenshtadt are as follows:

"There probably are some inter-governmental reasons why the United States government could not build this super railroad to the southern countries, but there is no reason why a private corporation, financed with American money and some money from the citizens of the countries it would run through, could not finance it" (p. 91).

"There are some uninhabited sections in South America one hundred miles square that could be purchased from the governments now owning them. The natural resources from these regions could be sold at a profit which would more than pay for the 9000 miles of a Super International Railroad" (p. 93).

[25] Fort Knox is a fortress where the American Treasury stores its gold under double guard.

main function should be the balancing of international accounts. He writes:

. . . This is, in effect, what happens when foreigners pay us for excess exports in the form of gold. The gold is purchased by the Treasury and thus dollars are made available to foreigners with which to pay for the excess American exports. To be sure, the Treasury has obtained gold, but buried in Fort Knox it is of doubtful value. It is, of course, true that the Treasury can very neatly get out of its own difficulty by depositing the gold, or rather gold certificates or gold-certificate credits, with the Federal Reserve Banks, thereby receiving in return a balance at the Federal Reserve Banks. By so doing, the excess of American exports is financed not by the taxpayer but by an extension of Federal Reserve credit. It is, in fact, paid for by a multiplication of the money supply.

It is not to be wondered at that the gold purchase business, as a means of financing excess American exports, looks like hocus-pocus to many people. Some would prefer to go straight to the heart of the problem and finance excess American exports through an expansion of Federal Reserve credit without buying the gold and storing it away in Fort Knox. . . ."[26]

Here Hansen actually develops his theory of deficit financing (or credit expansion) into a world law. Not only exports of goods, but export of capital as well, can be financed by expansion of credit. "The aggravation of the saving-investment problem can be avoided by deficit financing acting like a force pump on a world scale."[27] Hansen's position is perfectly clear: the creation of an international currency fund, with the United States playing the leading part, will, according to him, initiate such a "force pump" policy in which the United States, as the principal disburser of world credits, will be the primary moving force.

But here Hansen prefers to hold his peace on two points: first of all, the huge reserves of world currency in the form of gold accumulated by the United States are not at all unimportant for that country, as the principal partner of the world currency fund. Secondly, the policy of a world "force pump" can become, and actually has already become, a method of subjecting other countries to political pressure in order to subjugate their economies to American monopolies.

With frankness and a cool head, the problem of United States world expansion is analysed by a professor of Washington University, George Taylor, whose sensational book *America in the "New" Pacific* published by the Institute of Pacific Relations has gone through five editions.[28] In Chapter VII eloquently entitled "Asia for Whom?" he writes:

America has to lead in the Pacific because that is what the war is about. There is no room in the Pacific for both the American and the Japanese type of expansion. Conflict with Japan was the logical result of a century of policy.

[26] Alvin H. Hansen, *America's Role in the World Economy* (New York, W. W. Norton, 1945), pp. 142-43.

[27] Translator's note: No page given, I re-translated this passage into English without checking.

[28] Mr. Ayzenshtadt evidently means five printings. The book was originally published in 1942.

Calling things by their proper names, Taylor lifts the curtain over the pre-war American policy in Asia:

> In the XIXth century the policy of United States in Asia was directed towards strengthening Japan when Russia tended to become too powerful, and conversely, to support Russia when Japan gained strength, at the same time preventing too great a weakening of China. United States used its influence to prevent the growth of Russian and Japanese influence in Manchuria.[29]

United States and Britain, says Taylor, aimed at "training Japan for the role of Asia's policeman."

With equal clarity, the ideologists of American imperialism also approach the Near and Middle Eastern problem. Elliot thinks that "the United States is the most remarkable country in the world, having accepted a 40 billion dollar lend-lease debt without any real prospects for its repayment."[30] As a compensation, he demands the participation of United States government in loans extended to other countries for productive purposes. This particularly refers to countries which are in the British "sphere of influence."

> . . . There is, for example, no reason why we should not go into Iranian or Middle Eastern oil with our eyes open, if we go in at all, and ask for a definite governmental share as a method of underwriting loans. The British Government owns such shares now; and without our joint support this area, important as an oil area for both our navies and our airlines, may well be at the disposal of governments under other domination. United States should become the silent partner of the British Empire.[31]

Taylor goes further than Elliot. According to him, the United States should become more than a silent partner of the British Empire: it should replace it. In this process, the United States "will naturally lose its democratic appearance."[32]

Taylor not only demands the liquidation of all remnants of democracy in the United States; he also presents a program for "the export of the ideas" of American imperialism.

According to him, "the United States is engaged, first of all in the . . . export of ideas. The concepts of family, Christianity, of individual rights—all these," says Taylor, "have revolutionized Asia."

> The United States has exported its economic philosophy, according to which the whole of humanity (and first of all of course—the United States—A.A.) has a right to a free access to world supplies of raw materials . . . and also

[29] Translator's note: No page being given, I re-translated this passage without checking it.

[30] For source, see note 31. No page was given for the present quotation, and therefore I re-translated it without checking. Several sentences approximating its meaning can be found on pp. 196-97.

[31] William G. Elliot, "An American Estimate of Britain's International Economic Position," *America's Place in the World Economy* (New York University, 1945), p. 197.

Translator's note: The last sentence does not appear in the original quotation, though the idea itself is expressed on p. 198.

[32] Translator's note: No page given, I translated it without checking.

according to which the state derives the greatest benefit from free enterprise.

The "propelling forces" of this export of ideas are Christianity, Civilization and . . . Commerce, or the three C's.

Thus, the export of ideas is accompanied by the export of goods; Christianity plus Commerce, or more correctly, Christianity as one of the objects of commerce. Here Taylor finally does away with the garb of hypocrisy, and the true aim of American imperialism appears before us in its real light.

More than any other nation, the United States has relied in the Pacific on the power of ideas. . . . But at the same time it has made full use of American dollars as well as of American gunboats.[33]

"Ideas" were thus implanted by means of dollars and gunboats. This confession fully illuminates the moving forces of American expansion. And Taylor frankly admits that "the penetration of United States into Asia is very far from the refinements of a drawing room story."[34]

". . . The United States," says Taylor, "is an imperial power in the Pacific by virtue of the conquest of the Philippine Islands in 1898, the seizure of the Hawaiian Islands and such steppingstones as Midway, Wake, and Guam . . ." (p. 22).

The men, the institutions, the philanthropic and commercial dollars (Christianity and Commerce expressed in dollars.—A.A.) and the energy put into this expansion had an effect which cannot be measured exactly. It is not the number of Christian converts that matter. The fundamental point lies in the world expansion of American influence. . . .[35]

It is impossible to portray American capitalism in a more naked form than that presented by its preacher Taylor.

Having rejected his democratic positions as if they were excess ballast, Taylor drops them on the way, and, with a "relieved soul and opened eyes," preaches the imperialistic expansion of the United States in the hope that this expansion will save capitalism.

The essence of all these "conceptions" lies in the preaching of an expansionist program for American imperialism. Therefore the exposure of the "ideology" of the adherents of American monopolistic capital is one of the necessary conditions for the peace and safety of peoples.

[33] The quotations in the text are my translations of Mr. Ayzenshtadt's paraphrases of Mr. Taylor's ideas expressed on pp. 22-25 of his book. To what extent Mr. Ayzenshtadt correctly interpreted Taylor's ideas, the reader can judge for himself.

[34] Translator's note: No page given.

[35] Translator's note: This paragraph, with the exception of the last sentence appears on p. 25 of Taylor's book. The last sentence is stated as follows: "It is not the number of Christian converts that matter, but the widespread acceptance of the American view of life."

COMMUNICATIONS

Professor Friedman's Proposal: A Comment*

Many economists will view sympathetically Professor Friedman's attempt to set forth long-run objectives of economic policy, fewer will look favorably upon the proposal suggested to him by these objectives, but many will quarrel with his analysis of the effects of this proposal.[1] Moreover, consideration of the "Implications of the Proposal if Prices are Flexible and Lags in Response Minor" (Section IV) suggests immediately the following question: what are the implications of flexible prices and frictionless economy in the absence of a "built-in" policy for stability such as that embodied in this proposal? Particularly, it seems questionable if, under such assumptions, his proposal would lead to progress toward the stated objectives beyond that of "discretionary action."

Friedman (p. 254) recognizes that one of the cornerstones for a rational economic program for a free enterprise system is price (including wage) flexibility. Admittedly price and wage rigidities destroy the virtue of the proposal and the "most that can be expected under such circumstances is a reasonably stable or moderately rising level of money income." This seems to me to be somewhat cold comfort. Although Friedman apparently feels that this maximum contribution in the face of price rigidity would have salutary effects on monopolistic practice and hence "make flexibility of prices a good deal easier to achieve," there is evidence to suggest that factors other than general deflation play a larger rôle as cause for such practices.[2] Furthermore, with rigidities present, and the virtues of the proposal largely nonexistent, it is likely that policies not consistent with the proposal would be more effective. The illustration presented by Friedman of the effects of price rigidities (p. 253) in fact shows this to be the case. Assuming a stable economy, reasonably full employment, and wage rates rigid against downward pressure, then a rise in wages of any group requires a higher aggregate money income if employment is to remain stable. But his proposal at this point would bring forth a government surplus (receipts rise by more than

* The author is indebted to Miss Annette Weifenbach and Mrs. G. N. Conly of the Haynes Foundation for suggestions and criticisms during the preparation of this note.

[1] Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *Am. Econ. Rev.*, Vol. XXXVIII, No. 3 (June, 1948), pp. 245-64.

[2] See G. J. Stigler, *The Theory of Price* (New York, 1946), pp. 198-201. Stigler suggests the desire for gain and the desire for power, neither necessarily cyclical in intensity, as the principal motives of monopoly. See also, F. C. Mills, *Price-Quantity Interactions in Business Cycles* (New York, 1946), p. 107. Mills finds price flexibility increasing as deflation progresses.

expenditures) which in turn forces a deflation the consequence of which can only be unemployment, since prices are assumed rigid. Friedman himself suggests the solution. "The only escape from this situation is to permit inflation" (p. 254), but for him there is no escape; discretionary monetary policy which might "permit" the required inflation is taboo. Price rigidities due to contractual arrangements, monopoly, or inertia are an inescapable element of economies for which fiscal and monetary policy must be designed. Price flexibility, even if it were achieved, would yield a full employment equilibrium only under "very special conditions," none of which would necessarily be created by the several elements of Friedman's proposal.[3] Thus, policy, to be effective, must at best be designed to contribute substantially to stability in economies in which price rigidities exist, and must at least not be completely ineffective in the face of rigidities.

There is virtue, however, in knowledge of the process by which monetary and fiscal devices bring about results, even though the conditions assumed are heroic. Perhaps knowledge of this process in a simplified setting is a necessary first step in understanding the effects of these devices in the real world, one in which frictions and price rigidities are significant. But Friedman's investigation of the implications of his proposal assuming flexible prices and minor lags contains errors so important that the virtue of his analysis is lost.

According to this analysis, the fundamental correctives for a decline in aggregate demand "are (1) a decline in the general level of prices which affects (a) the real value of the community's assets and (b) the government contribution to the income stream, and (2) an increase in the stock of money" (p. 259). Price decline following a fall in aggregate demand, according to Friedman, will increase the real value of the community's assets, hence increase the propensity to consume, and therefore increase aggregate demand. His faith in this force is sufficiently strong to justify the statement that this force "would alone be sufficient to assure full employment. . . ." But the propensity to consume is not sufficiently sensitive to holdings of real assets to make the required response come about; furthermore, there is evidence that the effects of price decline on expectations is such that the consumption function is adversely affected.[4]

Friedman's second fundamental corrective, an increase in the stock of money, originates from the government deficit created and the fact that the

[3] *Cf.* Oscar Lange, *Price Flexibility and Employment* (Bloomington, Indiana, 1944), pp. 83-85. The consequences of perfect price flexibility on the level of employment provides the basis for much of the controversy between the disciples of Lord Keynes and economists of classical persuasion. The former vigorously deny that perfectly flexible prices will guarantee full employment. The latter have varying degrees of confidence in price flexibility, depending on the extent of the Keynesian "taint." An interesting and thorough discussion of this controversy is to be found in a recent article by Don Patinkin, "Price Flexibility and Full Employment," *Am. Econ. Rev.*, September, 1948, pp. 543-64.

[4] *Cf.* Patinkin, *op. cit.*, p. 554, note 19, pp. 557, 558; and Lawrence Klein, "The Use of Econometric Models as a Guide to Economic Policy," *Econometrica*, Vol. XV, pp. 122-25.

proposal requires that the deficit be financed by the issue of money. This increase is assumed first to raise the average propensity to consume in the same manner as price decline raises it (by increasing the value of real assets) and, therefore, to raise prices and aggregate demand until a full employment equilibrium is reached, at which time the deficit ceases to exist and no further increments to the money stock occur. As indicated above, it is doubtful if the propensity to consume will react so as to bring about the results Friedman assumes. In this case, however, there is somewhat more hope that it will, for expectations are unlikely to be severely damaged, but the fact remains that the effect on saving of changes in the value of assets is likely to be small. The proposal precludes increases in the stock of money beyond that created by the automatic deficit. Sharp discretionary increases in money are proscribed. The proposal provides a sop to the more vigorous deficit spenders, but rigidly limits the extent to which the policy may be carried. The process of recovery is based not upon direct increments to aggregate demand resulting from government investment; rather it is based upon the hope (probably vain) that the propensity to consume will increase.

If, however, we make the assumption that there is a direct relation between the propensity to consume and the real value of assets (a questionable assumption at best, but one necessary to Friedman's argument), there is still considerable doubt about the manner in which the anticipated outcome is brought about. Friedman's position, as stated on pages 259-61, is that either falling prices or constant prices and an increased stock of money will increase the real value of assets, hence the propensity to consume and hence aggregate demand.

A decrease in prices (increase in the real value of assets) must be sufficient to raise the consumption function; the magnitude of the adjustment required depends upon the extent to which aggregate demand is deficient. Falling prices may so damage expectations that any rise in the consumption function is offset by decreased investment. In other words, the increase in the propensity to consume would have to be the greater the more responsive investment is to decreasing prices. And, as prices fall, the favorable effect upon consumption will ultimately tend to grow progressively weaker. Some individuals (the rich) will not be induced by increasing real asset values to spend larger proportions of their incomes on consumption. Rather, they will save more. Others, of course, will increase this proportion but increases in the average propensity to consume due to the shifts in their spending habits are limited. Thus, the deflation may have to be extreme before the net effect upon aggregate demand is sufficient to restore a high employment equilibrium.

Friedman's second fundamental corrective appears, on the other hand, to offer somewhat more comfort, but for reasons other than those he suggests. An increase in the money stock also will increase the real value of assets, and to the extent that this pushes the consumption function upward it will, it is true, cause aggregate demand to react favorably. In this instance, the decline in prices need not necessarily exceed that associated with the original decline in aggregate demand. But since the increase in the money stock is limited by the extent of the deficit, further price decrease may be essential if the in-

crease in real asset values is to drive the consumption function upward. Moderate price decline is unlikely to depress investment as much as precipitate decline. If, after the initial deflation, the increased money stock is alone sufficient to lift consumption, then investment may increase and itself assume the principal rôle in restoring full employment. It is this possibility, that investment will increase, which makes Friedman's second fundamental corrective slightly more palatable than his first; yet, he apparently prefers to disregard it.

Thus, even granting Friedman's necessary assumption (that the consumption function and real asset values are directly related), the mechanism by which a favorable equilibrium is restored is considerably more complex than that described in "Framework for Economic Stability." Adjustments required when discretionary action is foresworn may be extreme, so extreme that the proposal will provide instead a rigid framework for instability. It seems apparent that this proposal for "built-in flexibility" requires such unique reactions that it could not (even in a flexible price world) be relied upon to do the job alone; even there discretionary counter-cyclical policy is necessary. In a world of rigidities and frictions such policy is even more essential.

PHILIP NEFF
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Rejoinder

The central feature of the monetary and fiscal framework for economic stability outlined in the article criticized by Dr. Neff is that it dispenses as much as possible with discretionary action and relies almost entirely on automatic reactions. While Neff does not discuss explicitly the relative merits of automatic and discretionary action—of "rules" *vs.* "authorities"[1]—it is clear that this is the basic issue between us. To Neff, "even in a flexible price world . . . discretionary counter-cyclical policy is necessary. In a world of rigidities and frictions such policy is even more essential."

I shall first comment on this basic issue and then turn to Neff's explicit criticisms: (1) that "admittedly price and wage rigidities destroy the virtue of the proposal"; (2) that my analysis of the proposal "assuming flexible prices and minor lags contains errors so important that the virtue of [the] analysis is lost."

1. *Alternative Stabilization Policies*

Neff does not argue that the automatic reactions under the framework I outlined will have effects that are in the wrong direction, but rather that they

[1] Henry C. Simons, "Rules versus Authorities in Monetary Policy," *Jour. Pol. Econ.*, Vol. XLIV, No. 1 (Feb., 1936), pp. 1-30; reprinted in Henry C. Simons, *Economic Policy for a Free Society* (University of Chicago Press, Chicago, 1948), pp. 160-83. It should be noted that Simons emphasizes the political implications of rules versus authorities and not merely their relative effectiveness. The restriction of the comments below to the latter question does not reflect any doubt about the virtues of "rules" in preserving political democracy; it is occasioned rather by the irrelevance of the political issue to the present discussion.

"could not be relied upon to do the job alone." This criticism makes sense only if alternative or supplementary discretionary policies are known that are reasonably certain to temper instability more effectively than the automatic reactions alone. Yet Neff does not even state explicitly what policies he favors, let alone establish a case that they would be more effective. Can it, then, be taken for granted that the addition of unstated and undefined discretionary action will necessarily improve matters?

The contention that this can be taken for granted is typically defended somewhat as follows: You admit that your "proposal may not succeed in reducing cyclical fluctuations to tolerable proportions," that "the forces making for cyclical fluctuations may be so stubborn and strong that the kind of automatic adaptations contained in the proposal are insufficient to offset them to a tolerable degree" (my article, p. 264). Why, then, not simply add discretionary action to the automatic reactions so as to be ready for all eventualities? After all, a discretionary authority can certainly do at least as well as your "rule," since, if it thought that the "rule" would work, it could refrain from taking any action or make its action identical with that which the "rule" would produce. If it took any additional action, it would be because the rule wasn't working well, so that the additional action could be presumed to improve matters.

Despite its plausibility, this argument is fundamentally fallacious. In the first place, even if the authority could and would do exactly what the "rule" prescribed, the results might well be very different. A "rule" gives the community a different basis for predicting the reactions that will take place than an "authority" does. Thus the same actions will be attended with a different degree of uncertainty, and I should argue more uncertainty, if carried out by an authority than if the result of a "rule," thereby changing the cyclical forces to be countered.

In the second place, it is not clear that an authority could follow the "rule" even if it thought it desirable to do so. It would be subject to political pressures, and affected by the general climate of opinion. To be successful, the authority must take action largely counter to that being taken by the rest of the community. Can it have the independence of mind and strength of character to do so? If it does, can it remain in power? Our experience along these lines should make us anything but sanguine. The Federal Reserve System has operated under highly advantageous circumstances, yet I think it likely that on balance its discretionary action has been destabilizing, the most striking example being the sharp deflationary action it took in the fall of 1931.

It may be replied that the political pressures that would prevent an authority from operating successfully would prevent adoption of the "rule." This may be, but the first amendment to the Constitution offers an instructive example of the possibility that the community may favor a self-denying ordinance proscribing a bundle of actions most or all of which, taken separately, it would favor.

In the third place, it is not obvious that additional discretionary action would improve matters even though the authority were completely free from political pressure. There is no more egregious fallacy than the belief that a

series of counter-cyclical actions will on balance be stabilizing if only they are in the "right" direction more frequently than in the "wrong" direction; stated differently, that an authority will do harm only if its actions are perverse. On the contrary, a series of actions, most of which are in the "right" direction, may still intensify cyclical fluctuations rather than reduce them.[2] Further, as I argued at some length in the article under discussion (pp. 254-58), circumstances that would make the automatic reactions I described work poorly or be destabilizing would be extremely likely to make discretionary actions of the kind so far proposed work even worse or be even more highly destabilizing.

We do not have an acceptable theory of cyclical fluctuations or of the causal forces at work. But it is clear that lags in response play an essential rôle in the generation and propagation of cyclical movements. And it is precisely these lags that render uncertain the effectiveness of counter-cyclical action. Yet the presumption that discretionary counter-cyclical action will be predominantly or overwhelmingly in the "right" direction is implicitly premised either on negligible lags or on an ability, which we clearly do not have, to forecast future movements in aggregate demand.

These implicit assumptions perhaps explain why most proposals for discretionary counter-cyclical action specify explicitly neither the location of authority for action, nor the criteria on the basis of which action is to be taken, nor the precise action to be taken. If reasonably concrete specification of these essential features of the proposals were attempted, I believe that the present appearance of widespread agreement on discretionary counter-cyclical policy would dissolve into thin air. The agreement is on objectives, not on a reasoned proposal for social action.

2. *Price Flexibility*

Both Neff's comments and those made by others suggest that my article can be justly criticized for not dealing explicitly with the "excluded middle" between "perfect flexibility" of prices, including wages, and complete rigidity, at least against declines. To bring out starkly the rôle of price flexibility, I analyzed in detail the two extreme cases, though I did mention in a footnote that the effectiveness of the proposal did not depend on " 'perfect' flexibility of prices, however that might be defined" (my article, p. 258). Neff applies the analysis of what I designated "an extreme example" directly to the real world, accepts my conclusion that "the only escape from this situation [the extreme example] is to permit inflation" (my article, p. 254), and proceeds to recommend that

[2] See Milton Friedman, "Lerner on the Economics of Control," *Jour. Pol. Econ.*, Vol. LV, No. 5 (Oct., 1947), p. 414, especially footnote 12.

The fundamental point is contained in the statistical theorem that the variance of a sum of two components is the sum of the variances plus twice the covariance. A negative covariance is thus not enough to insure that the variance of the sum is less than the variance of one component; in addition, the covariance must exceed in absolute value one-half the variance of the other component. In connection with the present problem, one component may be taken to be the aggregate demand in the absence of the counter-cyclical action contemplated; the other component, the addition to or subtraction from aggregate demand attributable to the counter-cyclical action.

inflation be permitted. Having gone so far, he should have gone farther and inquired whether even inflation would be a permanent "solution." Would it not have to become cumulative to remain a solution? Would not the resultant inequities and disruptive economic effects lead the community to prefer considerable unemployment to continued inflation?

Reality, of course, corresponds to neither extreme. At most, "many prices are moderately rigid, at least against declines" (my article, p. 253). Under such circumstances, the virtues of the proposal are not destroyed; the proposal will work better than under extreme rigidity, less well than under extreme flexibility. With a moderate degree of rigidity, "a reasonably stable or moderately rising level of money income" would be an eminently satisfactory outcome.

In the present state of our knowledge—or ignorance—reasonable men can hold widely different judgments about the quantitative importance of price rigidity. My own judgment is that there is more danger of exaggerating than of understating its importance. Further reflection and observation of the course of events have led me to attach even less importance to rigidity than I did when I wrote the article. Given a substantial segment of reasonably flexible wages and commodity prices, the fact that other commodity prices and wages are rigid will increase the average level of "frictional" unemployment; but is unlikely to be a serious obstacle to the effective operation of the proposal. Casual observation is particularly treacherous on a point like this. One tends to neglect devices invented to circumvent apparent rigidities. Moreover, rigidity is far more newsworthy than flexibility; it leads to consequences that command attention. We hardly ever realize that the price system is operating except when its operations are interfered with.

3. *Analysis of the Implications of the Proposal*

The section of my article that Neff characterizes as containing "errors so important" as to destroy the virtue of the analysis does not pretend to be an exhaustive analysis of cyclical forces. It is explicitly restricted to describing the "stabilizing economic forces" on which the "ideal possibilities of the monetary and fiscal framework proposed . . . depend" (my article, p. 258). It thus neglects forces not directly connected with the monetary and fiscal framework (*e.g.*, "changes in relative prices and interest rates," my article p. 259), and only mentions by way of qualification such factors as "the number and magnitude of the disturbances to which the economy is subject, the speed with which the equilibrating forces operate, and the importance of such disequilibrating forces as adverse price expectations" (my article, p. 261-62).

The chief conclusion of this analysis is that there are four main automatic reactions that would come into play to counteract changes in aggregate demand: [1] "the adjustment of transfer payments and tax receipts to changes in employment. This eases the shock while the defense is taken over by changes in prices. [2] These raise or lower the real value of the community's assets and thereby raise or lower the fraction of income consumed. [3] They also produce a government deficit or surplus in addition to the initial deficit or surplus resulting from the effect of changes in employment on transfer pay-

ments and tax receipts. The final line of defense is [4] the cumulative effect of the deficits or surpluses on the stock of money. These changes in the stock of money tend to restore prices to their initial level." (My article p. 261, numbers in brackets added.) I called (1) a "shock absorber" and (2), (3), and (4) the "more fundamental correctives" because (1) alone can at best offset only part of the decline in real aggregate demand and is in operation only so long as there is unemployment, whereas the remaining forces are not so limited.

Neff's criticism of this analysis is marred by a serious error of omission. He does not even mention (1), and he completely neglects (3). Thus he comments, "The process of recovery is based not upon direct increments to aggregate demand resulting from government investment; rather it is based upon the hope (probably vain) that the propensity to consume will increase." But forces (1) and (3) are analytically equivalent to "direct increments to aggregate demand" and their operation is entirely independent of any effect of changes in the real value of assets on the propensity to consume.

The omission of (1) is particularly regrettable. The federal fiscal system now has vastly greater "built-in flexibility" than before the war, largely as a result of the increased importance of the income tax and the changed technique of tax collection. Indeed, I believe this is by far the most important change in recent years in the economic environment relevant to stabilization policy. Estimates by Musgrave and Miller, as well as other evidence, suggest that force (1) alone is likely to offset something like a quarter or a third of any change in aggregate demand.[3]

As nearly as I can tell, the positive errors of which Neff accuses me are (a) that I suppose the average propensity to consume to be positively related to the real value of the community's assets—or perhaps that I suppose this relation to be quantitatively more important that it is; (b) that I neglect or understate the effects of adverse price expectations; (c) that I take no account of indirect effects on investment, apparently themselves largely to be explained by adverse price expectations.

a. It is not clear whether Neff denies that, other things the same, a rise in the real value of the community's assets will raise the average propensity to consume. In any event, he argues that the "propensity to consume is not sufficiently sensitive to holdings of real assets." I do not see how either the existence or direction of the effect can be denied. As indirect evidence of its importance, I would cite the relative secular stability of the propensity to consume, and the apparent absence of strikingly wide differences between rich and poor countries in the propensity to consume. The effect in question seems to me one of the major explanations of both phenomena. But this is evidence for a secular effect, not for a relation over short periods. Empirical evidence on the short-period relation is almost completely absent. Additional work on this problem is urgently needed. Suppose, however, that a reasonably accurate estimate of the magnitude of the effect were available. How large

[3] R. A. Musgrave and M. H. Miller, "Built-in Flexibility," this *Review*, (Mar. 1948), pp. 122-28. As was pointed out in my article (footnote 20a, p. 261), force (1) is the only one taken into account by Musgrave and Miller.

an effect would make the propensity to consume "sufficiently sensitive"? On this point, I believe that Neff's neglect of forces (1) and (3) leads him to overstate the "sensitivity" that in some sense is "sufficient."

b. When a decline in aggregate demand sets in, prices tend to decline. Neff argues that this decline in prices will lead to expectations of further price decline, and that these adverse price expectations will cause consumers to reduce their consumption, and business enterprises to reduce investment, thereby offsetting, or more than offsetting, any favorable effects of the price decline on the propensity to consume *via* its effect on the real value of the community's assets.

This possibility cannot be denied and, as noted above, was explicitly recognized in my article. Here again the question is empirical. How likely are price expectations on balance to be favorable rather than adverse? If adverse, how large will their destabilizing effect be? My judgment on this point is very different from Neff's. I should argue that price expectations may be expected to be largely stabilizing or neutral in the early stages of either a decline or rise in prices, and to become strongly adverse only at a considerably later stage when the decline or rise has degenerated into a drastic deflation or inflation. The behavior of the velocity of circulation in the earlier stages of all great inflations of history and our experience in two world wars seems to me to lend strong support to this view. But it may be argued that there is asymmetry between rises and declines in prices, that rises are generally expected to be reversed, but declines to continue. There is less evidence for declines than for rises, but I should argue that our experience in 1929-31 and, indeed, in most contractions, supports, or, at least, does not contradict, the view expressed.

The prevalence of the view held by Neff is to be explained, I think, by concentration on dramatic cases such as 1931-33 and the later stages of great inflations and by the temptation to think in terms of drastic rather than gradual price movements. I doubt that 1931-33 can be explained as a direct consequence of adverse price expectations. It is better explained, in my view, by the inappropriate action of the Federal Reserve System in the fall of 1931, which in turn led to adverse price expectations and other cumulative forces that rendered the subsequent reversal of Reserve policy ineffective. "*Natura non facit saltum*" applies to changes in aggregate demand as well as to other economic changes. Surely, the typical case for which counter-cyclical policy should be designed is a gradual decline or rise in aggregate demand, in which case discontinuous changes in expectations are hardly to be expected.

Finally, the existence of a stable monetary and fiscal framework will itself be a factor tending to stabilize expectations. In view of the historic instability of monetary and fiscal forces, particularly monetary, the surprising thing is that expectations have not in the past been even more destabilizing.

c. In so far as Neff's dissatisfaction with my treatment of investment reflects more than a difference between us on the importance of adverse price expectations, I suspect that it arises out of my failure to specify the source of the initial decline in aggregate demand that I assume to get the analysis going and my failure subsequently to mention explicitly changes in consumption or in investment other than those arising directly from the operation of the stabilizing forces.

It clearly makes no difference whether the initial decline in aggregate demand arises from an autonomous decline in consumption or in investment; in either case, the effect is identical. Subsequent induced changes involved in the so-called "multiplier" effect are implicitly taken into account in my analysis (see the second paragraph of footnote 19 on page 260 of my article and the accompanying text). Further changes are irrelevant to the argument. They are in effect included in "the disturbances to which the economy is subject." They affect the destabilizing forces which automatic reactions must counter, but not the operation of the automatic reactions themselves.

MILTON FRIEDMAN

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Final Comment

My difference with Professor Friedman is not based upon the belief that all fiscal and monetary policy should be discretionary, that "authority" is to be preferred over "rule" in every instance. Indeed it would be as impossible to establish a monetary and fiscal system completely devoid of "rules" as to provide ironclad guarantees against any future discretionary action. I feel rather that some discretionary action will be required, particularly in view of price rigidities and volatile expectations. Friedman, in his rejoinder, considers the central feature of his proposal to be the fact that "it dispenses *as much as possible* with discretionary action and relies *almost* (my italics) solely on automatic reactions." Thus both of us apparently believe that discretionary action will have a significant rôle to play, in spite of the virtues of a logical fiscal and monetary system.

The supplementary discretionary policies called for by the failure of the economy automatically to right itself are several. Friedman himself (pp. 253-54) describes deflationary conditions which monetary inflation would correct, while the contribution which may be expected from a discretionary government investment program has been the subject of extensive literature over the last decade and a half. It is possible that Friedman and I would disagree on what particular action would be appropriate to given circumstances but his suggestion in the rejoinder, "that to be successful the authority must take action largely counter to that being taken by the rest of the community," leads me to believe that even on this we would not be far apart.

Friedman and I agree that price rigidities and lags complicate counter cycle policies, but disagree with respect to their significance. I hold that whenever price rigidities defeat automatic adjustments, whether these adjustments be those resulting from Friedman's proposal or those that are now inherent in the system, discretionary action can provide some contribution to fuller employment. That lags will reduce the efficiency of either automatic or discretionary action is quite clear, but Friedman's belief that his proposal minimizes lags is not convincing. Surely the change in variables that brings his "correctives" into operation could be relied upon as a guide for policy.

In my earlier reply to Friedman's article I failed to comment on his correctives (1) and (3) because they already operate in our system, and although I appraise their strength somewhat less than some economists, I wel-

come their existence. Though these correctives have not in the past been sufficient to head off every contraction, it would be nonsense to deny them some salutary effect. My argument represents an attempt to show (contrary to Friedman) that correctives (2) and (4) could not be relied upon to do the job alone, for the favorable effects, unfortunately, are accompanied by unfavorable ones. Obviously, the success of any program for built-in flexibility depends upon the job to be done. If correctives (1) and (3) are sufficient, then no sensitivity of the propensity to consume to real asset holdings is required. But if contraction continues, a high degree of sensitivity is essential if Friedman's proposal is to operate successfully. Evidence concerning its sensitivity is fragmentary, but I believe that "the secular stability of the propensity to consume, and the apparent absence of strikingly wide differences between rich and poor countries in the propensity to consume" supports my position, not Friedman's. Moreover, if a deflationary movement is sufficiently mild that price expectations are favorable, then certainly the required sensitivity of the propensity to consume is less than in periods of contraction sufficiently sharp to create adverse price expectations.

PHILIP NEFF

Hungary's Monetary Crisis: Comment

In the September, 1948, issue of the *American Economic Review*, Professor Nogaro published a very interesting paper under the title "Hungary's Monetary Crisis and its Theoretical Meaning." Unfortunately, some errors can be found both among his statements of fact and the conclusions he arrives at, which I should like to correct.

First of all, what Professor Nogaro says about the motives that led to the introduction of the tax-pengő needs amplification. According to him "The tax-pengő's creation was quite empirical; it did not follow from any preconceived ideas. Its purpose was to guarantee tax revenues" (p. 539).

This is not the whole truth. The reason for introducing the tax-pengő as money of account was to enable the National Bank through the valorization of credits to grant credits justified both on general grounds and in the particular case and, at the same time, to prevent the firms from making profits out of the depreciation of the currency brought about by the inflation which at that stage was considered to be unavoidable. The war destroyed the real working capital of the firms while the inflation destroyed their monetary capital. Restarting production was impossible without providing credits, for wages had to be paid. The reparation deliveries require special consideration. A large part of the reparation goods consisted of machinery requiring long production periods. To finance their production, credits or advances were necessary. Accounts could be settled, of course, only after the delivery of the goods and it seemed just that the credits and advances granted should be valorized in one way or another lest the firms should make inordinate profits. Apart from that, many firms required credit to restore the productive capacity of their war-damaged plant. The government thought that the

bank of issue should provide these credits without, however, letting the firms make inordinate profits.

It was to be hoped that the valorization of the commercial credits by means of the tax-pengő would ensure the reflow of at least part of the great quantity of money issued in the course of the inflation. If on January 1, 1946, the date of the introduction of the tax-pengő, when 1 tax-pengő was equal to 1 paper-pengő, somebody contracted a short-term credit of 1 million pengős on the condition that after three months he would have to pay back as many times more paper-pengős as it had been necessary to issue in consequence of the inflation, the repayment of the larger amount of paper-pengő would, it was thought, to some extent counterbalance the effects of the inflation.

Another motive was, and Professor Nogaro is right in pointing this out, to valorize tax-receipts, not only the direct taxes but also the indirect taxes, amongst them the purchase taxes fixed in percentage of the prices of goods.

It seems to me that the scheme broke down for four reasons:

1. At the time of the introduction of the tax-pengő, the volume of credits was extremely small and did not by any means correspond to the real needs of economic life. For the reasons given above credits had to be granted in an increasing volume but when due were not repaid but prolonged. Thus the expected reflow of money never took place.

2. The national economic budget lacked equilibrium. Professor Nogaro does not seem to be aware of the importance of the economic budget when in the section "A New Conception of Inflation" (p. 534) he is puzzled how the sum total of the money incomes could have surpassed the aggregate money value of the goods and services available. Although he does not say so, he must have been thinking in terms of the concepts of the market theory of Jean Baptiste Say, according to which the total value of output included the incomes of all those who had been instrumental in producing it. This conception is valid only if two conditions are fulfilled: (a) The sales price of every commodity is greater than its cost price; (b) The people in receipt of salaries and wages want to buy the goods that have been produced.

We may add as a third condition that the balance of the budget is achieved by ordinary means, *i.e.*, without recourse to an inflation.

After the war none of these conditions was fulfilled in Hungary. The sales price of many a commodity was fixed below the cost price out of social considerations. This did not mean that the firms producing them were working at a loss because to bridge the gap they contracted credits which melted away in the inflation. At the same time, as mentioned above, they profited in carrying out an investment program with the help of inflated credits. Economic equilibrium suffered even more from the fact that the purchasing power distributed in the form of salaries and wages created a demand for goods which at that time were not available. The recipients of incomes wanted consumer's goods, the quantity of which was not sufficient. A larger part of the social product was made up of producers' goods than was warranted by the volume of savings, the more so because owing to the low in-

come level the propensity to save was practically nil and the volume of savings hardly exceeded the enforced savings of the inflation. This period offered a striking illustration of the wage-fund theory: If the recipients of incomes refuse to save, their aggregate real income cannot exceed the available quantity of consumers goods.

3. The investments of the inflation period were greater than what the equilibrium of the national economic budget allowed. The inflation was therefore inevitable. However, the capital accumulation made possible by a rapid inflation led to the speedy reconstruction of plant. Had it not been for that, the subsequent rise of the national income would not have been as marked as it was.

In 1945-46 the composition of the social product could not be changed because there was no possibility of increasing the quantity of consumers goods. Before gathering in the harvest of 1946 the stocks of food and raw materials could not be increased. Neither was it possible to replenish them through imports in exchange for capital goods because these were needed at home to make the future extension of the production of consumers goods possible and because no consumers goods were available in other European countries.

4. There were also technical mistakes which speeded up the process of depreciation. For example, the fixing of the prices and wages in tax-pengő increased the volume of money that was necessary. The equilibrium of the national economic budget was not ensured in tax-pengő either. The sum total of the claims against the social product was, even if expressed in tax-pengős, greater than the total value of the consumers goods expressed in—by definition stable—tax-pengő. For the reasons given above this must have led of necessity to an inflation of the tax-pengő which, in its turn, speeded up the inflation of the paper-pengő. Later, the inflationary process was speeded up because the value of the tax-pengő expressed in paper-pengős did not measure exactly the actual depreciation of the paper-pengő, owing to the inevitable time lag. The prices which served as the basis of the computation were always the prices of the previous day and that led to a great difference between the legal and the real value of the tax-pengő. This fact was duly discounted by the market and led to speculative price increases. There was also an inevitable time lag between the inflow and outflow of money in the Treasury and thus, in spite of the valorization of the tax-pengő, the revenue collected in paper-pengős was much below what was needed. Finally, there was also the technical flaw referred to by Professor Nogaro, *i.e.*, that private individuals were able to defend themselves against the depreciation of the paper-pengő by putting their paper-pengős into the bank in the evening on the basis of the lower quotation of the tax-pengő of that day and drawing on their account a larger sum on the basis of the higher quotation next day.

In consequence, the valorization of the credits and the tax receipts proved to be a failure. But even if the experiment of the tax-pengő was unsuccessful, it cannot be denied that in other spheres Hungarian economic policy followed a clear and consequential line and that its consequentiality bore fruit.

Several phases can be distinguished in the economic policy of the postwar period.

1. In 1945-46, at the time of the inflation, the aim was the speedy reconstruction of plant. Even the land reform carried out in the Spring of 1945 had that aim. Appeal had to be made to the enthusiasm of the new owners to till the land that had become their own, even without the necessary number of farm animals and other equipment, and prepare the way to a bigger crop in 1946. With the large estates intact this would hardly have been possible because the landlords lost the necessary authority for the running of large farms and, in any case, would not have been able to pay their labourers and provide them with food. Although the formula used was different, the principle applied was essentially the same in manufacturing industry. The aim was the speedy restoration of the productive capacity of plant even if that required the pressing down of real earnings to a very low level.

2. On August 1, 1946, a new currency was introduced and a new pattern of income distribution was set up by decree. Salaries and wages were fixed not in proportion to the levels that prevailed at the end of the inflation period but on the basis of purely theoretical considerations. The same applied to the fixing of taxes and to the drawing up of the investment program of the State. The basis of the plan was a national economic budget which showed an equilibrium not only in its grand totals but also in details, in production and demand in individual sectors. The level of wages was raised considerably corresponding to the increase in the volume of consumers goods. The prices of manufactured goods were fixed below costs, the assumption being that the increase of the level of real earnings would bring the productivity of the workers to a level where the losses of the industry would be eliminated. The gamble was bold but was successful. While 1945-46, the first year following the war, served the reconstruction of plant, 1946-47, the first year of the currency reform, served the increase of real income.

3. In the Three-Year Plan launched on August 1, 1947, the two aims appear in combination. It is intended to increase the capacity of plant and the standard of living simultaneously.

In addition to these comments I should like to rectify some errors which crept into statements of fact.

The depreciated pengő of 1938 was made equal to 2.29 forints and not to 2.07 forints. But as the gold value of the 1938 pengő was fixed in fact but not in law, it must be mentioned that the gold value of the pengő introduced on January 1, 1927 was 3.5 times greater than that of the forint.

According to a statement on page 526, 828 octillion (1 octillion $= 10^{27}$) depreciated pengős were equal to 1 prewar pengő. The statement is erroneous partly because the parity was fixed in a way different from what Professor Nogaro assumed and partly because the change-over from the depreciated pengő to the forint was an arbitrary action. It is wrong to try to establish the rate of the depreciation of the pengő at the end of the inflation backwards from the value of the forint. The only true measure is the purchasing power. Applying that, we find that the commodity value of 1 pengő in 1938

was about equal to that of 1.4 nonillion (10^{30}) depreciated pengős in July, 1946.

On page 532 Professor Nogaro says that rents were fixed at 60 and 40 per cent, respectively, depending on the highness of the rent. In fact, the 40 per cent level was the one adopted and that had to be multiplied by 3 to arrive at the forint rent whereas the multiplier used in the case of prices was in general over 4. Thus the level of rents is below 30 per cent. Exceptionally higher rents are being paid for large flats but the greatest part of the difference is collected by the Treasury in the form of a tax.

STEPHEN VARGA*

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Hungary's Monetary Crisis: Rejoinder

I have read with much interest Professor Varga's comment. It is a useful addition to the data which I have been able to gather from the documents available to me and especially from his own article in the *Neue Zürcher Zeitung.*

I note with satisfaction that the "errors of fact and of interpretation" which he mentions are quite few, that they refer to relatively unimportant details and that they do not change my conclusions.

Professor Varga questions whether the creation of the tax-pengő was entirely empirical. He points out that its creation also answered the need for opening credit accounts to businessmen without permitting them to repay these advances by a currency which had lost a great deal of its purchasing power between the time of the loan and the time of repayment.

I was quite aware of this use of the tax-pengő, but some of my sources indicated that its creation was entirely empirical and had not originally had this purpose. I therefore acknowledge Professor Varga's interpretation.

As to the figures which I mentioned in connection with the depreciation of the pengő, I calculated them exactly on the basis of the data which were available to me. Professor Varga explains that the depreciated pengő of 1938 was equal to 2.29 forint and not to 2.07 forint, the figure which I used. Again, I defer to his views. Furthermore, I know as well as he that the only standard which can be employed in comparing effectively the value of the two monies, is their purchasing power.

BERTRAND NOGARO

Inflation and Equality: Comment

In the December, 1948 issue of this *Review,* Professor David McCord Wright concludes (although in the form of a question) that, in order to meet the threat of secular inflation, we need "(1) less taxation of profits, (2) less progressive taxation, (3) higher interest rates."[1] Both (1) and (2) mean a redistribution of the tax burden in favor of the rich and against

[1] D. M. Wright, "Inflation and Equality," *Am. Econ. Rev.,* Vol. XXXVIII, No. 5 (Dec., 1948), p. 896.

the middle- and lower-income groups. The argument of this comment is, first, that it is misleading to argue that tax reductions on high incomes are necessary "in order to increase saving"; second, that if the objective is to increase investment, there may be other ways to do it, more acceptable to the egalitarian ideas that some of us possess; third, that there exists no obvious case on welfare grounds why inflation should be curbed primarily by reducing consumption rather than investment.

Professor Wright holds, first, that inflation rather than unemployment seems to be our secular outlook for "about 25 years." For the sake of argument let us accept this. Now inflation means that the real spending desires of consumers, investors, and government exceed the real capacity of the economy to produce. Hence, if inflation is to be avoided, the sum of such expenditure desires must be reduced. As between reducing consumption and reducing investment, Wright chooses consumption. To say that consumption plus investment expenditures tend to outrun capacity production is equivalent to saying that investment tends to outrun saving. This way of putting it, however, is not well adapted to sound analysis of some aspects of the problem, since it tempts us toward fallacious reasoning of the sort that follows. If we don't want to reduce investment, then we must increase saving. What groups do most of the saving? The high income groups. How do we get them to increase their saving? Let them retain more income, by reducing their taxes. Despite the poor family mentioned in *Fortune* who were barely "getting along" on $25,000, both Wright and I believe that the rich have a marginal propensity to save greater than zero—appreciably greater, I'd say. Hence, more disposable income, more saving. The way to solve our problem is to increase the disposable income of the rich.

Now I am sure that Wright realizes the fallacy in the argument as I have stated it, but some others who talk this way don't, and Wright's argument is not well calculated to disillusion them. *Reductio ad absurdum:* even the poor have a marginal propensity to save at least slightly greater than zero. Hence we could get *still more saving* by reducing their taxes, too. The trouble is, of course, that if you increase disposable income by tax reduction you do increase saving, but you also increase consumption, and add to rather than subtract from the inflationary pressures. The problem of inflation control is not to increase saving, but to reduce consumption. It is misleading to argue that we need to reduce taxes on the rich "in order to increase saving" and thus control inflation.[2]

It is obvious, of course, that if a *given* total amount of taxes is to be collected, taxing the poor reduces consumption somewhat more than taxing the rich.[3] I see little reason, however, why we need to think in terms of a

[2] The same fallacy is involved in the depression argument that we should "soak the rich" because they save too much. Although Wright repeats this prescription, it too is wrong. "Soaking the rich" reduces their consumption (as well as their saving) and is, by itself, deflationary.

[3] Although the conclusion of Musgrave and Painter ("The Impact of Alternative Tax Structures on Personal Consumption and Saving," *Quarterly Journal of Economics*, August, 1948) is that redistribution of the tax burden cannot have important effects either way.

given total amount of tax collection. It is likewise clear that taxation heavy enough to exert control over recent inflationary pressures cannot be confined to the rich—there are simply not enough of them, and their total consumption is too small. I take these facts for granted, and assert that they are not particularly relevant to Wright's argument. If the problem is to avoid inflation, without reducing investment, then we must reduce consumption, and it doesn't much matter whose. If there is fear that additional taxation of high incomes might reduce attempted investment, why is Wright not content merely with additional taxes "on the ordinary citizen"? Why must we *reduce* taxes on the high incomes, as is clearly suggested at several points?

Is this merely because inequality is desired on other grounds? Professor Wright has argued elsewhere, and very ably, the case for inequality.[4] Although I cannot fully accept his conclusions, I recognize the difference as largely one over *values*. My objection here is only to the necessary association of the question of equality with that of inflation control. Avoiding inflation without reducing investment does not call for reducing taxes on the rich.[5]

It is essential to recognize that Wright does not hold that there is any problem of inadequate incentives to provide the amount of investment now taking place (or now attempted). Indeed, if there were, *inflation would not be our secular outlook*. "Only if we deliberately attempt to discourage investment incentives would the case be different. Up to now our discouragement of new investment has not affected the rate of planned investment quite that much."[6] Wright's argument for tax reduction on high incomes may therefore rather be of a different character, a character which is there largely by implication, not through clear statement. Perhaps it can be stated as follows. Today we have a sum of attempted investment plus attempted consumption that is too great. It is not enough merely to reduce consumption to the extent necessary to avoid inflation. We must rather reduce consumption still more than this, and provide for a still higher rate of investment than now attempted. To do this we must not only *increase the tax burden*, which will reduce consumption, but we must *redistribute it in favor of the rich*, which will increase investment. An actual reduction of taxes on the rich is indeed necessary to *this* argument.

[4] "Income Redistribution Reconsidered," in *Income, Employment and Public Policy, Essays in Honor of Alvin H. Hansen* (Norton, 1948), pp. 159-76.

[5] To be sure, Wright's suggestion that the tax reduction take the form of an exemption on saved income would tend to reduce the consumption of the rich, but only if the rate on income not saved were raised sufficiently high. If the rate were not sufficiently increased on income not saved, the rich might end up merely with lower taxes, higher saving, and higher consumption, and the inflationary pressures be increased. The suggestion is worthy of study, but, it seems to me, only if we are willing to concede in advance that it may be worthwhile to bribe the rich to decrease consumption by allowing them to pile up, more rapidly, claims to future income. This, again, is a question of values. Reducing consumption by higher taxes does not have this by-product.

[6] "Inflation and Inequality," p. 895. The sentences quoted follow this curious one: "Supposing that we do all we can to discourage consumption, the probabilities are that the secular need for current new investment would still be greater than the saving flow." If doing "all we can" includes added taxation, what does this mean?

I may be mistaken, of course, that this is what Wright has in mind. At one point he speaks of lowering taxes on the upper incomes "in order to get more saving *and more investment*" (italics mine). At other points he might be understood to be arguing merely that we need to avoid inflation without reducing investment from its present attempted rate. But in view of his previously quoted position regarding the strength of present investment incentives, it would not seem that reduced taxes on profits and on the rich would be necessary if the objective were merely to avoid reducing investment from its present attempted rate. It is this which leads me to the interpretation I have suggested above: tax redistribution is advocated as a means of securing increased investment. If investment incentives are now strong enough that we are threatened with secular inflation, why otherwise would we need to increase them?

Now this case for a combination of both higher and less progressive taxes must rest on two propositions, neither of which Wright assays systematically, if at all: (1) There is a "welfare" case for a greater rate of investment than now attempted; and (2) Tax reductions on profits and on high incomes will induce a rate of investment greater than that now attempted, and this is the only or the best method of securing added investment.

Take the second proposition first. Accept for argument's sake Wright's view that we want *private* rather than public investment. Is it clear that greater bait for potential investors is the only or the best method to get added investment? One whose value judgments as to the desirability of inequality on ethical and political grounds differ from Wright's might insist that we first try tax reforms of other sorts, monopoly busting, patent reforms, subsidization of technical research, elimination of uncertainties regarding future government actions, and similar measures. In any case, he would put the emphasis on profits taxation rather than income taxation.

But whether Professor Wright is arguing for a rate of investment greater than that now attempted, or merely maintenance of the present rate; whether or not he convinces us that reduced taxation of profits and high incomes is the only or the best way to stimulate investment; he fails, it seems to me, to face up to the vital question of how to justify this high rate of investment. He assumes, that is, that there is an obvious welfare case for a high rate of investment. Why is this obvious?

Grant it to be true that "all over the world today, and even in our own country, the masses of mankind are striving for and demanding a standard of living which our present equipment is inadequate to furnish," Professor Wright is aware, I am sure, that we are here back on classical battlegrounds. What is the optimum rate of capital accumulation if it is not necessarily merely the rate required to provide full employment without inflation? Was not the classical answer (assuming full employment) that it was the rate at which marginal time preference equals marginal product of additional roundaboutness? Would not the Classical answer to the present situation be that the rate of interest should rise, increasing saving and curbing investment? This seems to be part of Professor Wright's answer too. But to the extent that equilibrium is restored in this way it involves *a reduction*

of investment as well as a possible (probably slight) decrease in consumption (increase in saving). Nowadays we attach little enough importance to the effect of the interest rate on investment, but we all assume (I believe), that its effect on saving is even less. Hence, rising interest rates would eliminate inflation primarily by curbing investment, exactly the opposite effect from that which Wright seeks. Certainly, *if* we desire not to reduce investment, it would be better to eliminate inflation by curbing consumption through added taxes. This points up, of course, the deficiency of the "natural rate" criterion for capital accumulation: what is the natural rate depends on the income distribution and tax structure.

Or does Wright have some other welfare criterion for determining the appropriate rate of capital accumulation? Do the masses acting through government know better than the masses acting as spenders of their own incomes what rate of capital accumulation they prefer? Or does a wise governmental elite know better than the masses acting either way what we and our unborn children want and deserve?

Perhaps welfare would be increased if we saved-invested more, but neither the welfare economists (Lerner in *Economics of Control* argues that this must be a "political" decision) nor Mr. Wright have told us on what grounds we should make this decision. We are all in favor of higher standards of living. But it is not that simple. The question is how far shall we reduce the standard of living in order to increase it. This is a profound and vital question, worthy of careful analysis. If our secular outlook were stagnation, perhaps there is no question: except for times like these, when investment should be discouraged, it is in the social interest to increase investment incentives to the maximum extent possible, and consistent with our distributive ideals (although this may merely intensify the problem subsequently). But if our secular outlook is inflation, we can not ignore the choice that confronts us, and economists need do more than to recognize that it is a choice. For those who believe secular inflation to be our outlook, here is a challenge for careful, original analysis.

Finally, as to whether or not secular inflation is our prospect, I feel incompetent to judge. I only quote a warning from Professor Wright: "Whenever prosperity appears, even momentarily, there are always people to exclaim that 'happy days are here again.' We are in a 'new era.' There will be no more depressions. . . .

"Shall we be like army officers always preparing to win the last war? During a boom, will our graduate students be trained primarily to prevent inflation—and hence be unprepared in slump? Will they in slump be trained primarily to prevent slumps and so let the next boom become an inflation?"[7] Unlike the businessman, whose estimate of the future is, we say, excessively colored by today's events, must not the economist always be sure to wear lenses corrected for myopia?

GARDNER ACKLEY*

[7] D. M. Wright, "The Future of Keynesian Economics," *Am. Econ. Rev.*, Vol. XXXV, No. 3 (June, 1945), pp. 306, 307.

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Inflation and Equality: Rejoinder

Professor Ackley impliedly concedes the basic factual assumption of my paper: the marginal propensity to save of the well-to-do is greater than that of the lower-income groups. He also (end of his sixth paragraph) spells out correctly my fundamental contention and concedes its logical validity. I did mean that the flow of net private investment ought to be (secularly) higher, and I do feel that the present aggregate net private (secular) inducement to invest, still more particularly that for risk-taking new ventures, under our present tax-wage-price control outlook, is only adequate where the (proportional) secular level of consumption is very high—too high.

Blaming the inflation on "excessive investment" alone seems to me true, even formally, only as tautology. The real stimulus can come from the consumption side. We might put the matter as follows: the people have become accustomed to demanding a certain *rate of increase* of real income. Price control and restriction of investment might, for a time, halt inflationary price rise. But *real* income might not be *rising* sufficiently. Therefore, there might be demands for "fourth-round" money wages increases, etc., which could start the inflation going again. Sometimes eliminating all saving-investment might not suffice to meet the demand for present consumption.

Since Dr. Ackley concedes my basic point, the real question becomes, as he says, one of values.[1] For brevity's sake I must discuss his main point only. Do not Dr. Ackley's doubts as to whether there is a "welfare case" for a higher rate of investment imply a sort of "iron law of consumer satisfaction"? Of course he does not commit himself to such a position, but would not the logic lead to some such statement as "all income levels are about equally satisfying (or unsatisfying). Progress is a delusion."

Now, if the public agreed, there would be no more to be said. But I believe in (1) democracy and (2) our duty as economists to help the people toward an *informed* choice. I say to the lower-income groups, "You want a rapidly rising standard of living. To get it more capital is needed, to get more capital we need more investment. Some moderation in your demands for equality today will give you more goods tomorrow—without inflation."[2]

It is important to realize that Dr. Ackley does *not* dispute the correctness of this argument under the circumstances assumed. What seems tentatively suggested is some such reply as this: "No, no, people of America, you will be just as unhappy no matter what your national income is. Equal distribution will give us 'enough' goods. Forget about growth."

I see nothing mysterious about the way to settle this argument—democratically. Leave it to the people through their representatives to make the

[1] For detailed statement of my values see *Democracy and Progress* (New York, 1948), especially the chapter on redistribution. Dr. Ackley is not correct in saying I argue for "inequality." I argue for as much *equality* of opportunity as we can get. Perhaps it might be best to say I argue for a *balance* of equalities, none of which can be wholly realized.

[2] Regarding the cycle, I have also shown, in *Economics of Disturbance* (New York, 1947), that there is a more or less insoluble conflict between demands for *prompt* satisfaction and demands for perfect stability.

choice: More equality today *versus* more butter tomorrow. *But* it should be an *informed* choice, a choice by an electorate that understands the alternatives, and is not misled by rosy delusions that we can get "plenty," now, merely by redistribution.

Only one technical point needs mentioning. Dr. Ackley seems to feel that under *any* circumstances raising the market rate of interest will "reduce investment." This is a widespread misconception of Keynesian theory. Inflationary "forced saving" is, of course, one way—possibly the characteristically socialist way (*vide* Russia)—of getting capital formation. But I assume we are agreed that this method is bad. Accordingly, we desire only investment without inflation. Now *ex ante* investment in excess of *ex ante* saving will tend to produce inflation. Raising the rate to an equilibrium figure, under such circumstances, will not reduce the amount of realized *noninflationary* investment. It will only cut off the margin of attempted investment "causing" the inflation! If we want *more* investment, without more inflation, then we want to increase the rate of *ex ante* saving—which is the point I started off with. The appropriate interest rate then would be the one rationing the increased flow without inflation.

In conclusion, I would like to remind my readers that my communication referred to the *secular* problem. Dr. Ackley quotes my "Future of Keynesian Economics."[3] I stand by that article in full. If serious depression begins, deficit finance and public works should, in my opinion, be integral *parts* of an effective program. This, however, does not affect secular policy. If private saving-investment would be needed again soon (and they will be if we adopt intelligent policy), we would be very foolish to liquidate the inducement to save for the sake of a short-run crisis.

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[3] D. McC. Wright, "The Future of Keynesian Economics," *American Economic Review*, June 1945, p. 284. This article, it is worth mentioning, was given a written general approval by Keynes himself. See also my essay on "The Prospects for Capitalism," *A Survey of Contemporary Economics*, H. S. Ellis, editor (Philadelphia, 1948).

Income Elasticity of Demand for Imports and Terms of Trade

The results which Pigou arrived at in solving the problem of transfer in terms of marginal utility functions[1] were elaborated and implemented in the form of diagrammatic analysis by Professors G. A. Elliott and J. Viner.[2] Viner further improved Pigou's methods by another procedure which does not resort to utility analysis but is still based upon the assumption that the proportion in which the expenditures are distributed between native and imported commodities remains unaltered in the two countries in the absence of relative price changes, as the amount available for expenditures varies.

[1] A. C. Pigou, "The Effect of Reparations on the Ratio of International Interchange," *Economic Journal*, Vol. XLII (1932), pp. 532-43.

[2] G. A. Elliott, "Transfer of Means-of-Payment and the Terms of International Trade," *Canadian Jour. Econ. and Pol. Science*, Vol. II (Nov., 1936), pp. 481-92. J. Viner, *Studies in the Theory of International Trade* (New York, 1937), pp. 336-60.

Professor Viner's conclusion is limited to a special case and can be shown by means of indifference curves[3] in the analysis of transfer problem.

In order to make our analysis throughout this discussion manageable, it is demonstrated in terms of a two-country-two-commodity case. In Figure 1, each country has a family of homogeneous indifference curves.[4] The ordinates and abscissas of both countries A and B are expressed in physical units which are so chosen that A's and B's commodities are equal in price with ordinates representing imports and abscissas, domestic goods.[5] The line ab

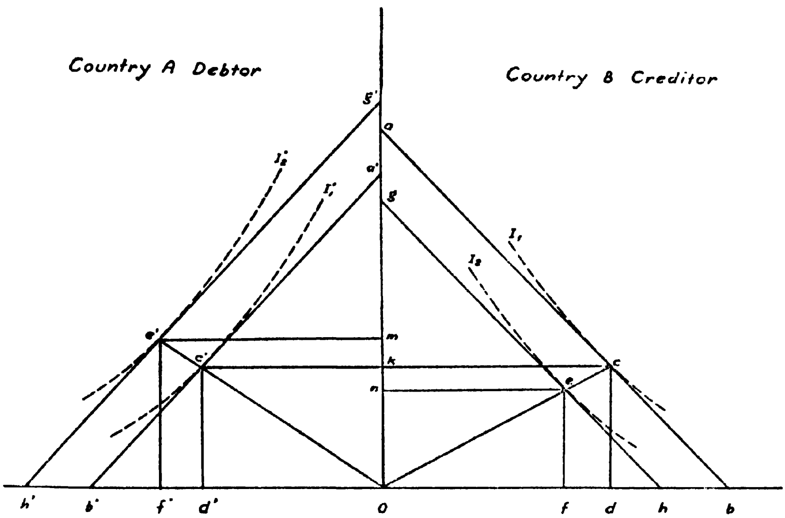

FIGURE 1

denotes all possible combinations of domestic and imported goods which country B can purchase with a given national income at the prevailing price before capital export. Country B will seek the preferable combination, *i.e.*, the combination on the highest possible indifference curve, which is I_1, and will buy od of domestic goods and ok of imports.

The a′b′ in Country A, which is analogous to ab in B before capital movement takes place, touches the highest indifference curve I'_1 at c′. As a result, od′ domestic goods and ok imports will be purchased by A. Draw such a

[3] T. Scitovszky, "A Reconsideration of the Theory of Tariffs," *Rev. Econ. Studies* (Summer, 1942) pp. 93-95, for community indifference curve.

[4] The assumption of a family of homogeneous indifference curves is another way of expressing the linearity and similarity of the utility function within each country, or Viner's assumption that "in the absence of relative price changes, changes in the amounts available for expenditure on the respective countries resulting from reparations payments will not affect in either country the proportions in which these expenditures are apportioned between native and foreign commodities."

[5] With the assumption that the physical units are so chosen that A's and B's commodities are equal in price, all the price lines must be 45° (Fig. 1). For instance, oa′ must be equal to ob.′

line $g'h'$ parallel to, but to the left of, $a'b'$ so as the difference between oh' and ob' ($h'b'$); og' and oa' ($g'a'$) would represent the amount of capital received by A; and of' and om represent the amount of A and B commodities respectively which A would consume after receiving capital, since e' is the point on the highest indifference curve which $g'h'$ can meet.

In country B, draw a line parallel to, but to the left of the line, ab, with the difference between ob and oh (bh); oa and og (ag), representing the amount of capital export, and of and on, representing the amount of B and of A commodities respectively which B would buy after capital export.

Now we are in a position to reproduce Viner's argument by means of our apparatus. He assumed that before capital movement each country spends more money on her own than on the other country's commodities, and, in the absence of relative price changes, the terms of trade will turn against the exporter of capital.

By assumption, $f'o : om = d'o : ok$ because I'_2 and I'_1 belong to a family of homogeneous indifference curves, and $g'h'$ is parallel to $a'b'$.

$$\therefore \quad f'd' : km = d'o : ok$$

By assumption, $od' > ok$

$$\therefore \quad f'd' > km, \text{ and similarly, } fd > kn$$

Since capital movement results in an increase in A's spendable funds equalling the decrease in B's spendable funds,

$$f'd' + km = fd + kn$$
$$\therefore \quad f'd' > kn \text{ and } fd > km$$

It is evident that Viner's result is obtained through assumption, among other things, of a fixed ratio in which countries A and B would divide their respective expenditures between A's and B's commodities, *i.e.*, $od' : ok = of' : om$; $od : ok = of : on$, or, in other words, that $oc'e'$ and oec should be straight lines. But the proportion of expenditure between native and imported goods, in the absence of price changes, remains unchanged by variations in the aggregate amount of spendable funds only when income elasticity of demand for imports is equal to unity.[6] It is, therefore, a special

[6] The demand for imports can be represented algebraically by a functional relationship between the national income (Y) and the amount of expenditure on imports, M. Thus:

$$M = E(Y) \quad \ldots\ldots (1)$$

The elasticity of demand is given by the formula $E = \frac{dm}{dy} \div \frac{m}{y}$ ....(2)

As the derivative $\frac{dm}{dy}$ is almost invariably positive (since a rise in national income always brings about an increase in the expenditure on imports), E, therefore, is also positive. Solving the differential equation (2)

$$M = KY^{E} \quad \ldots\ldots (3)$$

This is the equation of a demand for imports of constant elasticity E. If the demand curve has unit elasticity, this equation becomes

$$M = KY \quad \ldots\ldots (4)$$

The curve then becomes a straight line passing through the origin

case, because there are other cases in which an elasticity could be greater or smaller than unity.[7]

There are three probable cases of elasticity of demand between the two extreme cases of a perfectly elastic demand and a perfectly inelastic demand, namely, (1) A relatively elastic demand (M_3), (algebraically, between $+1$ and $+\alpha$); (2) Unit elasticity of demand (M_1), (the algebraic value is $+1$); and (3) A relatively inelastic demand (M_2), (the algebraic value is between O and -1). Similarly, there can be five types of income elasticity of demand for imports in the other country. The terms of trade, after the capital movements have taken place, will also, *inter alia*, be conditioned by the possible combinations of income elasticities of demand for imports of the two countries.

We shall concentrate our attention on the three more probable cases of income elasticity and analyze their effects on the terms of trade. Let M_1 and M_1' be the curves of type (2) in countries B and A respectively, M_2 and M_2' for (3) and M_3 and M_3' for (1).

The combinations of the types of income elasticities in countries A and B are tabulated as follows:

Terms of Trade for Country B—Exporter of Capital

M1 M1′ – M2 M1′ – M3 M1′ ?
M1 M2′ – M2 M2′ – M3 M2′ ?
M1 M3′ ? M2 M3′ ? M3 M3′ ?

Therefore, even when the situation was considered before price changes had occurred, cases could be developed in which adjustment to the transfer might involve changes in the terms of trade in favor of the paying country, against the paying country, or no change at all.

Our scheme can also show diagrammatically how parallel monetary expansions could take place with the balance of payments being undisturbed. Let us put the question in this way. If there is an expansion of income from gh to ab in Figure 2, with an increase of mn imports to country B, how much income expansion should occur in A so that there is an equivalent amount of imports from B? The process of geometric construction will be as follows:

Let us suppose that the distribution of expenditure between domestic and imported goods of countries B and A at all levels of income is represented by P and P_1 respectively. (1) Draw a horizontal line parallel to X-axis

[7] Mr. M. Bronfenbrenner, in an elaboration of Pigou's analysis, has shown that the terms of trade of the capital export country depend, besides price elasticities, upon income elasticities and upon what he called intercommodity elasticities, and has given a general mathematical solution to the problem. The indifference diagram which measures two commodities along its two axes is useful and instructive in showing that Viner's diagrammatic scheme based on Pigou's mathematical condition is under the assumption of, among others, unitary income elasticities of imports. It may be observed that in any scheme of analysis in which the consumers can only divide their incomes between purchases of two goods and cannot possibly buy other goods than these two, there cannot be anything but a substitution relation between the two goods. The problem of analyzing the effects of international transfer would be more complicated if there are more than two goods on which consumers can spend their incomes, because in that case both complementary and substitution relationships would be possible. See M. Bronfenbrenner, "International Transfer and the Terms of Trade," *Studies in Mathematical Economics and Econometrics*, edited by O. Lange, F. McIntyre, and T. O. Yntema (Chicago, 1942).

from n cutting OP_1 at r. (2) Through r, draw a line a′b′ parallel to g′h′. Then we know that if country A wants to keep in step with the expansion of B in order to maintain an even balance of her international account, she should expand her income from g′h′ to a′b′.

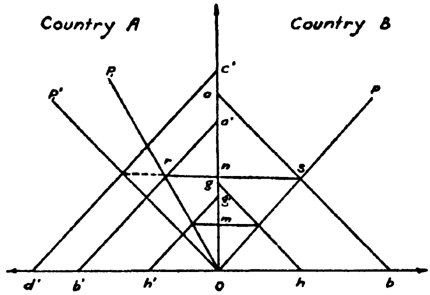

FIGURE 2

If the income elasticity of demand for imports takes the form of P'_1, a larger expansion to c′d′ is necessary. The diagram shows clearly that both the average propensity for imports and the income elasticity of demand for imports of each country will determine the degree of expansion necessary.

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Induced Investment, Overcomplete International Adjustment, and Chronic Dollar Shortage

In his communication in the March issue of this *Review*,[1] Professor C. P. Kindleberger defends against his critics, including myself, an argument he had advanced several years ago[2] to the effect that the dollar tends to be chronically scarce because "increased [American] imports will raise money incomes abroad and will produce increased demands for American products in excess of the original increases in American imports." Kindleberger's conclusion that there is a tendency toward an overcomplete international adjustment with respect to increases in American imports was deduced from his assumptions that "the United States has a comparatively low propensity to import and a low ratio of exports to national income, whereas the rest of the world has a relatively high elasticity of demand for United States exports of manufactured goods and a relatively high ratio of exports to income."[3] On

[1] "The Foreign-Trade Multiplier, The Propensity to Import and Balance-of-Payments Equilibrium," *Am. Econ. Rev.*, Vol. XXXIX, No. 2 (Mar., 1949), pp. 491-94.

[2] "International Monetary Stabilization," *Postwar Economic Problems*, ed. by S. E. Harris (New York, 1943), pp. 379 ff. The identical argument has recently been advanced by K. K. Kurihara, "Toward a New Theory of Monetary Sovereignty," *Jour. Pol. Econ.*, Vol. LVII, No. 2 (Apr., 1949), p. 166.

[3] Throughout his discussion Kindleberger used the terms "marginal propensity to import" and "income-elasticity of demand for imports" interchangeably. But these two concepts

the basis of those assumptions alone, however, Kindleberger's conclusion was clearly a ***non sequitur***. Additional assumptions were necessary to ensure its formal validity.

In his communication Kindleberger now comes forth with two such assumptions, namely, the existence in foreign countries of (a) a high rate of induced investment (presumably on a scale more than offsetting the increase in saving associated with the rise in foreign incomes), or (b) a negative marginal propensity to save. I venture to suggest that had he explicitly introduced either of those assumptions in his original article he would have been spared most of the gibes from his Washington friends to which he refers, although I rather suspect that he might still have received a residual of gibes for having attempted to construct a general theory of chronic dollar shortage on such a basis. Unless some such additional assumptions are postulated, the theoretical presumption must be that an increase in a country's exports, far from leading to a greater increase in its imports, will typically result in only a smaller, or at best an equal, increase. By now admitting the need for specifying further conditions, Kindleberger is in effect conceding at least one of the points that his critics had in mind. I had raised that point myself in an unpublished memorandum in 1944 which had been used by Professors Enke and Salera as the basis for the discussion of dollar shortage in their *International Economics*. But Enke and Salera did not point out, as I had explicitly done in my memorandum, that Kindleberger's contention regarding overcomplete adjustment to increases in American imports could indeed be theoretically valid if additional (but what I regarded as special) assumptions regarding induced investment (and other factors) were postulated; and they implied, obviously incorrectly, that an overcomplete adjustment was inconceivable. I had not, it is true, explicitly referred to a negative marginal propensity to save as another condition that would make Kindleberger's argument formally correct, but I did not, and most certainly do not, as he suggests, deny the possibility of such.

The real issue involved is not whether Kindleberger's particular point is theoretically valid, for if fortified by the appropriate assumptions it would be, but whether or not those assumptions are the most realistic ones to make. Apparently Kindleberger believes that they are, and he argues that in his original article he was interested, not in "economic models," but in "the behavior of real economies" (*op. cit.*, p. 492). It is my opinion, however, that he is dealing with special cases, not with the general one, and that consequently he is greatly exaggerating the importance in the real world of the sequence he outlines.

To express the issue in simple yet formal terms: is the marginal propensity to invest in foreign countries as a whole characteristically greater (in alge-

are, of course, quite distinct, as I noted in an article in the *Canadian Jour. Econ. and Pol. Sci.*, Vol. VI (1940), pp. 519-20 n. A continued loose usage of concepts is evident in Kindleberger's note when he speaks of a country with "a high foreign-trade multiplier and a ***high*** propensity to import" and of a country with "a low foreign-trade multiplier and a *low* propensity to import" (italics mine), *op. cit.*, p. 492. For surely a high foreign-trade multiplier is associated with a low marginal propensity to import, and conversely.

braic terms) than the marginal propensity to save? If so, then increases in American imports would, as Kindleberger argues, tend to cause greater increases in American exports, *i.e.*, to bring about an overcomplete balance-of-payments adjustment. If the opposite situation prevails, increases in our imports would tend to cause only an incomplete adjustment. If the propensities were exactly equal, increases in our exports would tend to be identical to the original increases in our imports.[4]

It may be admitted that in certain underdeveloped countries where the marginal propensity to save is very low (and indeed under certain conditions negative[5]), where there is a high rate of induced investment,[6] and where the marginal propensity to import *American* goods is high, an increase in American imports from such countries might well lead to an even greater increase in their imports from the United States. But it would, I believe, be unrealistic to assume—and I have as yet seen no statistical evidence to suggest—that the

[4] This formula merely rephrases one laid down in a broader context by L. A. Metzler, "The Transfer Problem Reconsidered," *Jour. Pol. Econ.*, Vol. L (1942), pp. 408 ff. See also J. J. Polak, "The Foreign Trade Multiplier," *Am. Econ. Rev.*, Vol. XXXVII, No. 5 (Dec., 1947), especially pp. 896-97, and F. Machlup, *International Trade and the National Income Multiplier* (Philadelphia, 1943), p. 184 n. Kindleberger's assumptions regarding the relative magnitudes of the relevant propensities in foreign countries would seem to correspond to the case of economies designated by Metzler as "unstable in isolation." It may be of interest to note that Metzler believes that few countries are in the "unstable" class and that, consequently, income movements induced by international shifts in purchasing power will be inadequate to bring about full balance-of-payments adjustment to disturbances.

Professor W. F. Stolper, using a more sophisticated set of assumptions, has recently argued that Kindleberger's point could be valid even if foreign countries were not "unstable" at all. See his article, "The Volume of Foreign Trade and the Level of Income," *Quart. Jour. Econ.*, Vol. LXI, No. 2 (Feb., 1947), pp. 305-08. But Stolper's assumptions seem to me of an even more special sort than those now introduced by Kindleberger. See also the critique of Stolper's over-all argument by G. Haberler, "The Foreign Trade Multiplier: Comment," *Am. Econ. Rev.*, Vol. XXXVII, No. 5 (Dec., 1947), pp. 904-06.

I can think of several other sets of special assumptions that would make Kindleberger's thesis formally valid, but these need not be elaborated here.

[5] Since Kindleberger chooses to introduce the possibility of dissaving as a factor tending to cause overcomplete international adjustment (although he admits that "in general, individuals tend to save more as incomes increase"), he should not overlook the possibility of induced *dis*investment as a factor working in the opposite direction. A rise in a country's exports might at times be associated for a considerable period with substantial net drafts on existing stocks of exportable and other goods. Such induced disinvestment, even in the face of dissaving, would tend to make for an incomplete adjustment, unless the dissaving were larger than the disinvestment in absolute terms, *i.e.*, unless the marginal propensity to invest were greater in algebraic terms than the marginal propensity to save. For an interesting illustration of such induced disinvestment in actual practice, see A. F. W. Plumptre, "The Distribution of Outlay and the 'Multiplier' in the British Dominions," *Canadian Jour Econ. and Pol. Sci.*, Vol. V (1939), pp. 369-70.

[6] I am using the term "induced investment" here in a broad sense to include all increases in domestic investment associated directly or indirectly with rising exports, namely: increased investment in export and domestic-goods industries induced (a) by rising national income (*i.e.*, the acceleration effect); and (b) by increased availability of loanable funds and/or lowered interest rates that might be brought about by an increase in external monetary reserves resulting from the rise in exports.

marginal propensity to invest in foreign countries as a whole is characteristically in excess of the marginal propensity to save so as to create an underlying tendency for increases in aggregate American imports to bring about greater increases in our aggregate exports. Although I am somewhat skeptical of attempts to prove or disprove Kindleberger's point by reference to the actual statistics of American imports and exports, given the large number of autonomous factors at work affecting each, it seems to me significant that during the interwar period increases in our imports were characteristically associated with smaller, and not with larger, increases in our exports.[7]

Kindleberger attempts to support his thesis statistically by reference to the balance-of-payments experiences of Argentina and Australia in 1935-38. But, apart from my skepticism regarding a statistical approach to this problem, particularly from the viewpoint of the balances of payments of individual foreign countries, and the fact that I consider highly inappropriate his selection of countries, I fail to find his evidence even mildly convincing. All that the Argentine statistics indicate is that the rising exports of Argentina in 1935-37 were accompanied by smaller increases in imports (the active trade balance rising steadily in these three years), and that the decline in exports in 1938 was accompanied by a smaller decline in imports (leading in this case to a deficit). Far from supporting Kindleberger's argument, this episode seems to indicate nothing more than the opposite, and normally anticipated, pattern of developments.[8] If his point were indeed valid, it would appear that the active balance should have *decreased* year by year and have possibly resulted in a deficit at the top of the boom in 1937. Even if the deficit that emerged in 1938 could be construed as evidence of a belated overcomplete adjustment, the statistics cited by Kindleberger refer only to Argentina's *global* balance-of-payments position, and not the position *vis-à-vis* the United States. For similar reasons, I do not find the Australian experience any more convincing, even though total Australian imports did continue to rise in 1938 (though at a sharply reduced rate) when exports declined.

In my original memorandum I had stated that if, as Kindleberger argued, increases in American imports tend to provoke greater increases in exports, the opposite result would seem to follow when imports decline, *i.e.*, a decline in American imports should provoke a greater decrease in exports and thereby

[7] For a suggested explanation of that pattern, see my paper, "The Mechanism of Adjustment of the American Balance of Payments: 1919-29," *Quart. Jour. Econ.*, Vol. LVII (1942-43), pp. 363 ff.

[8] Indeed, Kindleberger himself haltingly admits that his statistics might merely reflect "the effects of alternate rising prosperity and depression in the United States" (*op. cit.*, p. 493.) His attempt to show, *via* the composition of Argentina's imports, that the 1935-37 boom in that country was accompanied by *some* induced investment is quite irrelevant for his argument. The really relevant consideration would have been whether or not that investment was *large* enough (relative to saving) to bring about an overcomplete adjustment.

In any case, Argentina's foreign trade in these years was subject to so many highly abnormal influences that I would consider the episode almost worthless for purposes of testing the validity of this argument. See, *e.g.*, V. Salera, *Exchange Control and the Argentina Market* (New York, 1941), Chaps. 6 and 7.

tend to bring about a dollar "surplus." To be sure, I was aware that the relationship need not necessarily be symmetrical for upswings and downswings, but it seemed to me that the burden of the proof as to why this was not so rested with Kindleberger. In his communication he now argues for the irreversibility of his argument on the ground that "it is possible to regard the demand for commodities in international trade as elastic with respect to increases in income and inelastic with respect to decreases," and he refers to the fact that "luxuries have a habit of becoming necessities" (*op. cit.*, p. 494). What I presume Kindleberger means is that whereas the marginal propensity to invest in foreign countries is characteristically in excess of the marginal propensity to save in periods of rising income, so that there is a tendency towards overcomplete adjustment to increases in foreign exports to the United States, the reverse is true in periods of declining income, so that there is only an incomplete adjustment to decreases in such exports.[9] But, in any case, evidence for this alleged asymmetry is not forthcoming.

Even if one granted the *general* validity of Kindleberger's contention that increases in American imports typically tend to provoke greater increases in exports—which I do not—it would be an entirely different matter to conclude, as he does, that this sequence provides a theoretical explanation for the alleged tendency toward a chronic world shortage of dollars. I would argue that before such a conclusion could be reached additional—and again, I submit, special—assumptions would be necessary. But this involves a far more fundamental problem that lies outside the scope of this note.[10] May I suggest only that before talking of *chronic* dollar shortages one might do well to examine much more closely the concept of "dollar shortage" itself. In this connection Kindleberger might want to reconsider his own bald definition of a dollar shortage as the existence of a surplus in the American balance of payments on current account.[11]

I hope that the foregoing remarks do not constitute an abuse of Professor Kindleberger's amiable offer "to negotiate on a generous basis" with any critic who contends that he exaggerated the importance of his argument.

ARTHUR I. BLOOMFIELD*

[9] See also *op. cit.*, p. 493, n. 12. I might be inclined to agree that adjustments to increases in exports tend to be *more complete* than adjustments to decreases in exports. But this is not the point that Kindleberger is presumably attempting to prove (or, rather, should prove).

[10] For some recent suggestive contributions to this problem, see the articles by G. Haberler, T. Balogh and P. A. Samuelson in *Foreign Economic Policy for the United States*, ed. by S. E. Harris (New York, 1948), pp. 426-45, 446-89, and 406 ff.; H. S. Ellis, "The Dollar Shortage in Theory and Fact," *Canadian Jour. Econ. and Pol. Sci.*, Vol. XIV, No. 3 (Aug., 1948), pp. 358-72; F. D. Graham, "The Cause and Cure of 'Dollar Shortage,'" *Princeton Essays in International Finance*, No. 10 (Jan., 1949); J. Tinbergen, "Observations sur le Problème de la Rareté du Dollar," *Rev. d'Écon. Pol.*, Vol. LVIII, No. 1 (Jan.-Feb., 1948), 36-56; and S. E. Harris, "Dollar Scarcity," *Econ. Jour.*, Vol. LVII (June, 1947), pp. 165-78.

[11] See *Postwar Economic Problems*, p. 379.

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Rejoinder

I am disposed to accept Dr. Bloomfield's plea of *non mea culpa* in the matter of the Bloomfield-Enke-Salera contention that it is impossible for a country to overcompensate in response to an increase in its exports and end up with an import surplus. I trust he will make a satisfactory settlement with Messrs. Enke and Salera whom he has tossed to the wolves. I would, moreover, ask for dismissal of his countercharges of unfairly eliding assumptions and inelegance on the grounds of irrelevancy.

Two possible issues remain—one of logic, the other of experience. Dr. Bloomfield's contention that logic runs in favor of a presumption that all propositions are symmetrical cannot be accepted. I know of no authority for this bizarre bit of reasoning. Asymmetry at one level, moreover, may be symmetry at another level. If in the short run a country may spend more than its increase in earnings, there is no reason that it should save more when its earnings decrease, although this result is possible. It may be, moreover, that an explanation of the dollar shortage of some considerable generality may be found—if not alone in the tendency of certain other countries to overcompensate with respect to increases in exports—in this, in a tendency to undercompensate with respect to decreases and in opposite tendencies in the United States to undercompensate in respect to increases in exports and overcompensate with respect to decreases. In this explanation there is no symmetry within or between countries; but the over-all model is as symmetrical as anyone might wish.

I am not disposed to debate the facts with Dr. Bloomfield. I have acknowledged the difficulty of verification, although I do not go all the way with Dr. Bloomfield, who appears to despair of empirical testing of any proposition in this field. I cannot, however, accept the proposition that, because more theoretical models have been built by scholars with a tendency to undercompensate than with the opposite tendency, there is a strong argument in favor of the prevalence of this tendency. Without claiming that this makes Dr. Bloomfield "it" in the game of "burden-of-proof" tag, I suggest he might look into the Latin American experience of 1946-48 to see how large dollar deficits can be developed under the stimulus of expanding export sales to the United States; or into the nineteenth-century experience of Britain's debtors who borrowed more in prosperity when their exports rose; or into the history of corporations which have grown prosperous by going into debt.

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Libertarianism at Bay

Said Frank D. Graham to Barbara Ward:
"Your economics are deplored.
Your deficit to evaporate
You merely need depreciate."

Said Barbara Ward to F. D. G.:
"The trouble seems more deep to me.
I don't believe the fix we're in
Comes purely from original sin."

In writing this note, the author has no intention of restating why he believes Barbara Ward's *The West at Bay* to be on balance a good book, in the face of Mr. Frank D. Graham's conviction that it is "a subtly dangerous and a highly subversive one."[1] The author is sympathetically predisposed toward Mr. Graham's liberal premises and is in agreement with many of his specific criticisms. But he is in radical disagreement with Mr. Graham's perspective and therefore with his conclusions. The purpose of this note, then, is to question the manner of Mr. Graham's review and to express a doubt whether, despite the self-assurance of his attack, he may have missed the main points of Miss Ward's essay.

There has emerged in recent years a new fashion of egregious rudeness among self-styled "libertarians," who castigate the heretics with such vigor as to cast doubt on the libertarians' confidence in the weight of their logic. In Great Britain, this fashion has been so perfected in the postwar years that it threatens to replace constructive economic criticism by mere dialectical sniping. From the observer's point of view it is often fun to watch the pyrotechnics. But it hardly befits the aspirations of a fledgling social science to treat other earnest searchers for truth in the manner of Lysenko's disciples driving Mendelians from the temple. Nor can the easy victory of the *argumentum ad blurbum* be expected to carry much weight with an audience more interested in the content of a book than with the encomium on its jacket.

It might be argued that the libertarian onslaught is not intended to advance economic understanding or the state of the science among professionals, but is rather directed toward the makers of public policy, or even more broadly toward public opinion in general. If this is the case, the Hayek-Mises-Jewkes-Graham manner (the list does not pretend to be exhaustive) hardly seems well designed to its purpose. Anyone with the merest nodding acquaintance with the professional literature knows that the supposedly self-evident truths and indisputable verities of the libertarians are hotly disputed among the "experts." The layman also observes that in the real world such problems as inflation control, the maintenance of high employment, the provision of reasonable economic stability for agriculture, and the achievement of equilibrium in international trade without intolerable reductions in

[1] See this *Review*, Vol. XXXIX, No. 2 (March, 1949), pp. 548-53. It should be noted, incidentally, that neither Mr. Graham nor I had seen the other's review prior to publication.

living standards or politically impossible readjustments in internal economic relationships in various countries, do not in fact give way to easy panaceas. In consequence, while the layman's first reaction to the libertarian prescription may be enthusiastic—since a dose of freedom would satisfy one of his deepest yearnings—he is likely on more sober reflection to wonder if the excess of heat in the libertarian writing does not conceal an absence of light.

The most remarkable single statement in Mr. Graham's review is his assertion that "the 'dollar crisis' . . . is now (and, perhaps, always was) solely a matter of discrepancy between the controlled external (exchange) value of the pound sterling, and other European currencies, and their (lower) internal values" (p. 552). It is really breath-taking to see Europe's postwar economic problems disposed of so neatly and casually. There is no hint of the difficulties imposed by the loss of prewar overseas investments, by the wartime destruction of plant and equipment and merchant shipping, by the years of capital depletion, by the disappearance of Germany from the European economy, by the drawing of the economic iron curtain across the heart of Europe, by the changed position of the former colonial areas, by the adverse shift in the European terms of trade. There is no concession whatever (unless it be in the little word "perhaps") to the view that in many of the European countries dollar imports have been reduced to minimum tolerable limits by direct controls and that exports have until recently been as great as could be supplied in view of the war-induced dislocations, so that in the short run devaluation would merely have created added internal inflationary pressures and worsened the terms of trade. There is no recognition of the extreme uncertainty regarding import and export elasticities of demand.

The almost unanimous consensus of those with responsibility for international financial policy over the last few years cannot be effectively disposed of by references to "the tradition of Hjalmar Schacht, Thomas Balogh and the bullionists," who may be assumed to have a liking for nationalist controls for their own sakes. The fact is that most of the responsible officials, laymen and economists alike, would have liked nothing better than to whisk away the European economic problem with a few neatly contrived adjustments in exchange rates. The libertarian views are of little moment so long as everyone recognizes that the whole world is out of step except the libertarians. There may be some disadvantage for the profession, however, if laymen are led to believe that the libertarian dogma is shared by all economists, and there is always the more serious, if less probable, danger that a layman in high office might actually follow the libertarian prescription unalloyed.

A few words are in order, finally, on Mr. Graham's patronizing comment that Miss Ward "writes most engagingly, that her heart is in the right place and that, when she does not get beyond her depth, she swims very prettily indeed." Miss Ward's book is not addressed to professional economists and makes no pretense at being an essay in technical economics. It is guilty of a number of economic "howlers." Its prescriptions of policy would be greatly improved by a sounder technical substructure. But the policy issues of European integration are not exclusively or even primarily economic ones. Miss

Ward's argument draws its greatest strength from its historical, political, and moral foundations. Human society has many dimensions. The economic dimension has been better analyzed than most as a matter of intensive rationalization from narrow abstractions. The motivations of peoples and the policies of nations, however, do not lend themselves to such abstractions and there is ample evidence that they are moulded by other factors as much as or more than by the "purely" economic ones. It takes unusual audacity to be certain that, desirable though it be, a full appreciation of the principle of comparative advantage is more relevant to the problem of European integration than an understanding of the moral foundations of western civilization. One can hardly escape the conclusion that Mr. Graham's swimming suffers from a failure to understand which way is down.

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MEMORIAL

Frank Albert Fetter
1863-1949

With the death of Frank Albert Fetter the great company of American economists has suffered an irreparable loss. The profession of economics has grown mightily in numbers and influence in the half century of Professor Fetter's fruitful participation, but it is the paradox of human progress that the loss of a single creative mind cannot be balanced by numbers, knowledge, or prosperity. Rather, new creative minds must arise to the new challenges facing society, drawing not so much upon accumulating evidence for strength, but upon the personality and inspiration of those rare souls who in their time were great enough to recognize truth.

The facts of Professor Fetter's richly productive life are readily available. On his eightieth birthday, two of his colleagues prepared a comprehensive note for the record.[1] It seems fitting, therefore, now that he has completed his course, to comment on those elements of personality and character which must ever be reflected in the creative leaders of our profession if it is to serve mankind in attaining peace and well-being.

Professor Fetter was a friend to all who knew him. He early learned the secret that there is no limit to the richness of one's loyalties. A devoted son, husband, and father, his gentleness and understanding made the circle of his family a place of happiness and peace.

With neighbors, colleagues, and students, his sincere interest in each individual, his sensitivity to another's feelings, problems, and aspirations made him a true friend to an ever-widening circle of people, young and old. Slow to criticize but quick to understand, he helped others by wise counsel, seasoned with never-failing humor. With clear perception he aided all who came to him for guidance to see their problems in the perspective of mature judgment and firmly established values.

From the deep insight into human personality gained over the years as a friend and counselor, Professor Fetter attained a penetrating understanding of both the individual and the community. Before the approach of social psychology was under way, he was ever probing the motives and reactions of individuals and of groups of individuals forming complex societies. He was concerned in what actually took place and not in forcing behavior into a pre-determined mold. He tested his conclusions against those arising in the new discipline of psychology but his Hoosier common sense kept him from being swept away by the enthusiasms of younger pioneers.

Professor Fetter possessed that hall mark of greatness—simplicity. He was approachable to young students and great scholars, to the messenger boy and the president—to anyone in need. He had the capacity of reducing clouded and complex issues to manageable form, often with a touch of pungent humor

[1] *American Economic Review,* Vol. XXXIII, No. 1 (Mar., 1943), pp. 230-35.

that lessened tensions and encouraged objectivity. He had no love for complexity for its own sake. Rather, he sought to trim out the confusion of overworked pedantry and expose the essential thesis to analysis.

Professor Fetter was never over-awed by man-made authority. He rebelled against the classical economics of his student days and sought to get closer to the workings of the human mind. To him the "economic man" of earlier analysts was a barrier to the deeper understanding of the motives and restraints in human behavior. He thought things through for himself. Thoroughly read in the literature of his field and in the great classics of human thought, he did not permit others to do his thinking for him. It was, perhaps, a blessing that he spent eight years in business before he commenced his professional studies. His guiding rule was: doctors differ—work out your own conclusion.

His love of simplicity and his unwillingness to accept time-honored authority led Professor Fetter into the revision of the whole theory of economic distribution. He was not satisfied by separate, mechanistic explanations, but sought an integrated scheme. He believed that this essential scheme, like most great truths, would be simple, unitary, and consistent. In this he had the sense of dedication of the inspired scholar, whether scientist or humanist, who believes in his soul that God's ways are profound, but never arbitrary. The results of his analysis are still subject to debate. He would be the first to accept this outcome. But he opened new highways into the unknown continent of economic theory, and rekindled interest in pushing out the frontiers of knowledge.

As a teacher, Professor Fetter taught not by precept alone, but by the example of his devoted love for truth. He taught *men* rather than *materials*, and stimulated his students to seek wisdom and to challenge error. His students soon learned that the marshalling of past authority was insufficient to establish any point, and that the proof must arise from one's own understanding and reasoned analysis. His teaching was not a passing on of predigested truth, but an encouragement, by high example, sustained interest, and warmth of common understanding, of the student's search for knowledge. To his former students Professor Fetter will always stand, above all, as a guide, counselor, and friend rather than as an exponent of catalogued material.

Throughout his life Professor Fetter was ready to fight courageously for truth as he saw it, at the sacrifice of security, comfort, and health. He was ready to take the harder course of the pioneer and to resist the spiritual corrosion of easy conformance. Although tolerant and understanding of differences of taste, he opposed with great intellectual vigor and incisiveness any departure from the highest standards of scholarly integrity and independence.

But neither scholarship nor teaching alone could satisfy Professor Fetter's sustained urge to improve man's estate. In his earlier years he aided many welfare agencies. He worked for international peace, for the improvement of slum housing, for the institutional care of the sick, and for the improved education of young people in public schools and in correctional institutions. As time passed, he centered his interest in the great threat of monopoly as an undermining force in a free society. In this his deep understanding of economic

forces and his dedication to the public welfare joined to make him a powerful and fearless enemy of confusion and selfish interest. He saw more clearly than any other the growing dangers of the concentration of economic power to the freedom of the individual. Long after most men leave the battle to another generation to carry on, his devotion to the cause of the individual—his freedom and dignity—kept him in the fight against error and ignorance in high places. He spent his last energies in that fight. He died a valiant soldier in the cause of truth.

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BOOK REVIEWS

Economic Theory; General Economics

Introduction to Economic Science. By GEORGE SOULE. (New York: Viking. 1948. Pp. 154. $2.50.)

This book represents a valiant attempt to describe macro-economics in elementary fashion. It succeeds on the descriptive side but falls short of the mark in its analytical efforts. The reader learns a great many interesting facts and figures but is given inadequate guidance in utilizing them. In view of the title, it is also necessary to add that this book does not provide an adequate introduction to either the scope or method of modern economics. It does, however, raise or rather provoke some important questions of analysis. For this reason, more space is devoted to this review than the importance of the book itself would warrant.

The opening chapter is directed against the "classical theory." It is now widely agreed that both the Keynesian and classical systems can make their contribution to the understanding of economic problems. Yet Soule devotes his entire first chapter on "Economic Fundamentalism" to a condemnation of the classical school.

Soule points to five fallacies of the fundamentalists: the fallacies of "concealed premises," "missing quantities," "omitted factors," "separate pieces," and the "fallacy about human behavior." In his discussion of concealed premises, Soule makes the customary attack on *ceteris paribus* analysis. However, his proposal, as indicated in the rest of the book, is merely to substitute aggregative analysis, making use of national income and a few major components. This is a desirable emphasis but Soule fails to realize that national income analysis may be just as dependent on *ceteris paribus* assumptions as is the partial equilibrium analysis attacked by Soule. If we restrict ourselves to just a few broad aggregates, we cannot analyze the effects of, say, an increase in governmental expenditures, unless we make numerous *ceteris paribus* assumptions respecting individual propensities to consume, invest, import, etc., and exogenous changes in every component of national income or forces affecting it, except the ones immediately under discussion. These are thorough-going assumptions and the mere fact that they can be stated briefly should not mislead us—as it has apparently misled Soule—into believing that somehow we have magically allowed everything to vary at once while we carry on our analysis. If the alternative he proposed were either the Walrasian general equilibrium system or the modern econometric adaptations of either the Leontief or Tinbergen-Klein variety, it would be worth while taking his criticism seriously. These alternatives do reduce the necessity of *ceteris paribus* assumptions. Soule does not, however, propose these or even indicate that he is aware of them.

For many problems, *ceteris paribus* analysis may be used profitably. The fact that not all assumptions are stated explicitly, a matter which troubles

Soule greatly, must also be examined before wholesale condemnation is made. There are actually thousands of assumptions involved in any analysis. Most of them are never stated because they are taken for granted by reader and writer: assume that there will be no major national calamity; assume that people will not become vegetarians; assume that traders on the stock market wish to make a profit; etc. Any one of these assumptions might suddenly become unrealistic and the analysis will then be alleged to contain "hidden" assumptions. Nowadays we often preface our analyses with some explicit assumption about war but in the halcyon 'twenties there was no need to mention this eventuality. The assumption was implicitly there nevertheless. The deliberate hiding of a relevant and important assumption whose reality is known to be controversial is, of course, to be condemned; the mere failure to undertake the impossible task of listing all the innumerable conditions which are generally taken for granted must often be condoned as a necessity. Soule's superficial condemnation of *ceteris paribus* analysis is unfortunately shared by many professional economists—until they try to analyze an economic problem themselves. The econometricians have a workable substitute to offer but until their methods are more widely known we shall have to proceed as before with *ceteris paribus* assumptions and the technique of successive approximations to reality.

Soule's discussion of the other "fallacies" is subject to similar qualifications on methodological grounds. His emphasis on the significance of the full employment assumption of the fundamentalists is well placed and the limited applicability of their conclusions is clearly indicated. The resulting condemnation of their entire system is, however, unwarranted. Now that we have full employment and its inflationary problems, we are beginning to appreciate the keen insight which many fundamentalists have displayed.

Those students who have not otherwise become familiar with national income estimates might profitably be assigned the chapter on that subject, "Keeping Books for All the People" (Chap. 2). The chapters on "The National Income as History" (Chap. 3) and "The Gains in Production" (Chap. 4) also provide interesting summaries of factual data from studies of the National Bureau of Economic Research. These three chapters are marred, however, by the fact that references are made to both Kuznets and Commerce estimates without an indication of the definitional differences which exist between them. Moreover, the exposition of Stigler's interesting work on capital-productivity and labor-productivity (pp. 56-58) is not very clear.

The most valuable chapter in the book—from a descriptive point of view—is the one on "Budgeting for the Whole Economy" (Chap. 6). This contains an explanation of the nation's economic budget as presented in the Economic Reports of the President. Teacher and student can profitably read this chapter. Economists who have not as yet become acquainted with the useful macro-economic device of the national economic budget will find that this chapter provides a convenient means of doing so. Undergraduate or graduate students at any level might be assigned this chapter instead of, or as an introduction to, the President's Economic Reports.

One could wish that Soule's interpretation of the nation's economic budget were less mechanistic and that the author were less ready to reach major conclusions on policy with little or no analysis. The argument for control of prices, wages, salaries, and rents is presented in a few simple sentences, "Nevertheless, one of the most important gates at which to control the flow of spending was that of consumers. One obvious way to keep this gate from opening wider was to retain price control. For if consumers did not pay more for each unit, their spending could not increase, unless there should be more goods to buy. But suppose their incomes did increase. What would they do with the extra money? *Clearly they would have to save it. And, in that case, it would probably be invested* at home (that is, spent for capital goods) or invested or given abroad, thus increasing the spending of foreigners. *Even aside from black markets which may make price control more or less ineffectual,* incomes as well as consumer spending must be limited if total demand is to be limited. Therefore, it was important not only to have price control, but to limit rises of wages and salaries and to control rents" (p. 80, italics added). Here we have in quick succession statements that (1) increased income will be saved, (2) the savings will probably be invested, (3) black markets may make price control ineffectual. If the author is certain of (1), what will be the cause of (3)? Can we say that (2) will "probably" occur? There is lacking an analysis of inter-relationships and a review of some of the other relevant possibilities, such as purchase of government bonds, repayment of private debt, spill-over to uncontrolled activities, and many others. The significance of fiscal pressure is discussed on the next page, after the conclusion on price, wage, and rent control is reached. In the discussion of fiscal pressure, there is emphasis solely on the dollar magnitudes of expenditures and revenues: "The critical item here is the *difference* between government receipts and expenditures that is, the cash surplus" (p. 81). One would not expect a detailed consideration of the qualitative aspects of taxation and expenditures in a short book of this sort but there should at least be some recognition of the fact that such qualitative aspects are of importance.

The concluding section of this chapter, entitled "What Happened in 1947," illustrates the dangers of making a causal analysis of a past period merely on the basis of limited *ex post* data pertaining to that period. Figures are given for 1946 and 1947 on consumers' disposable income, consumers' expenditures, business surplus income (undistributed profits and reserves), business investment, net foreign investment, government receipts and payments. Confining himself solely to this information, the author finds, "The increase of investment which occurred was financed not out of larger savings by individuals, but out of larger undistributed profits" (p. 83). This conclusion is reached merely by comparing *ex post* savings with *ex post* investment. As far as these limited data go, the firms which undertook the investment (no break-down is given between capital goods and inventories) may have been financed by the banks while the firms which saved may not have made any investment in capital goods or inventories. The fact that saving must match investment, *ex post,* does not tell us how the investments were actually

"financed." The effects of credit expansion on the income categories are implicit in the national economic budget but the amount of credit expansion does not appear explicitly in the budget.

The chapter on "Ups and Downs of Business" (Chap. 5) is confined almost entirely to a summary of the Mitchell-Burns volume. Soule dismisses other work on business cycles with the statement: "As more attention began to be paid to the problem, a host of explanations was offered for the persistent rhythms of business activity. It would require a long book to summarize the many varieties of business cycle theory. But such a book would be more confusing than enlightening, since most of the explanations advanced have been based on guesses, partial observations, emphasis on one or two factors which overlooked the rest. Many of the theories are mutually inconsistent; some of the better ones fit some of the facts, but none fits all of them" (p. 62). After this broadside, one would at least expect a theory which fits *all* the facts. None is forthcoming.

In the matter of forecasting, the author exercises commendable caution: "Any forecaster who bases his predictions on a definite or average length of the cycle, or in any other way assumes that it is periodic in the sense in which movements of astronomical bodies are periodic, should be scientifically suspect" (p. 65). Later he says, "This does not mean that forecasting is a hopeless task. But it is by no means a mechanical one, to be performed by some simple trick, like noting a weather sign. We may hope eventually to achieve perhaps as high a percentage of success as the weather man, and by as complex methods. Good forecasting would involve, first, an inspection of forty or fifty statistical series to make up one's mind where we stood in a given cycle, and then the use of shrewd judgment about other factors" (pp. 66-67). Such humility, always desirable, is especially so in view of the limited coverage of business-cycle analysis evidenced by this chapter.

The least satisfactory chapter in the book is the one entitled, "How Money Appears and Disappears" (Chap. 7). The explanation of reserves and of the function of legal reserves is confused and inadequate. There is no explanation of how credit expansion is accomplished through individual banks to the banking system as a whole. Suspicions of confusion are confirmed by such statements as, "It (the member bank) can then borrow from the Federal Reserve Bank in order to lend more to its own customers. The maximum amount it can borrow is of course limited by the size of its reserve" (p. 92). Since lending to customers will increase deposit liabilities and thus reserve needs, it is hard to tell just what the author has in mind here.

In his three concluding chapters, "Private Enterprise in Fancy and in Fact" (Chap. 8), "Planning for Employment" (Chap. 9) and "The International Income" (Chap. 10), Soule presents additional factual information that is interesting and valuable. Among the subjects covered are: concentration in industry, the managerial control of enterprise, the Employment Act of 1946 and the President's Council of Economic Advisers, the Monetary Fund, the World Bank and the International Trade Organization. The discussion of the Keynesian theoretical system is generally satisfactory, considering the small space devoted to it. The by-passing of the interest rate and the misconception

of "hoarding" in the following statement, however, leads one to suspect some confusion in the author's mind: " 'Liquidity preference' means the preference people with savings may sometimes have to keep their money in cash rather than invest it. This, when it comes into play, naturally decreases investment. (Keynes held that society as a whole could not hoard money; if money was not spent or invested, it would, as a whole, disappear. For the cash one person failed to spend would diminish by that much some other income" [pp. 106-7]). Some confusion in the understanding of the effects of exports on the national income is also apparent. Referring to the fact that a positive net foreign investment appears as a negative item in the nation's economic budget, he says, "The item is a minus one in the budget because we supplied this part of our product without getting anything currently in return. *This accords with the fact that an export surplus is a subtraction from the income of the country that sends abroad more than it receives, though on grounds of policy it may sometimes be desirable*" (p. 137, italics added).

There is appended a convenient bibliography of about twenty items consisting mainly of the works summarized in the text.

This book is apparently intended as an "answer" to Hazlitt's *Economics in One Lesson*. Some of the well-known elementary textbooks in economics, for instance those of Boulding, Morgan, Samuelson and Tarshis, do contain a sufficient explanation of macro-economic analysis to provide a basis for an effective "answer." The present book does not. It contains relevant factual material and makes frequent allusions to the appropriate theoretical system, but it does not provide the reader with a way of thinking about (as opposed to a way of describing) national economic problems. As indicated above, several of the chapters are well worth reading. The book as a whole cannot, however, be recommended as an introduction to a college course in economics. Its influence on laymen and politicians should generally be salutary in that it argues convincingly for the value of economic statistics and for a continuance and expansion of the work of the President's Council of Economic Advisers.

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History of Economic Doctrines: An Introduction to Economic Theory. By EDUARD HEIMANN. (New York: Oxford Univ. Press. 1945. Pp. ix, 263.)

Considering the brevity of his book, Professor Heimann gives a remarkable presentation and interpretation of the leading ideas of economic theory from Aristotle to J. M. Keynes. His volume presupposes no previous training in economics and it can be read with profit by beginners who want a "short course" in economic doctrine. The book is also useful at a more advanced level because of numerous provocative insights and because of the self-conscious attempt to apply a distinctive approach to the history of economic thought. The point of view is modern in the sense that earlier theories are interpreted in the light of recent views of saving, investment, interest, money, and economic fluctuations. The style is simple, non-technical, and lucid.

Professor Heimann's book is an essay rather than a treatise. The purpose

of the essay is "to show the inward logic, revealed in retrospect, of the development of modern economic thinking and thereby to place the study of economic theory in its proper setting" (p. v). Economic theory is defined as the discipline which has been associated historically with the problem of the allocation of scarce resources in a free-market economy. The adjective "free" is used in a technical sense to designate an economy in which no central authority exercises control over the hierarchy of needs and the allocation of scarce means. The task which economic theory set for itself about two hundred years ago was "to discover and analyze the hidden law of coordination and integration in a free economy" (p. 9).

Although Professor Heimann conceives economic theory narrowly as a purely technical branch of knowledge concerned primarily with the value problem, he provides a comprehensive setting for explaining its historical evolution. Since his approach appears to be the main contribution of the volume, I shall attempt to explain it. This involves difficulties because Professor Heimann himself has not given a clear presentation of his approach, and his failure to do so is the chief shortcoming of his book. His thesis seems to be that the method employed by an economist determines the results of his theory. Three main elements enter into the choice of method: (1) the pervading spirit of the age, or what Heimann calls "the forms of man's understanding of himself," examples of which would be supernaturalism, naturalism, and historicism; (2) the general techniques of analysis, the most important divisions of which stem from the circular flow theory of Quesnay and the price analysis of Adam Smith; and (3) the position of the theorist in relation to the class struggle and group conflicts of his time. In taking this view, Professor Heimann rejects on grounds of inadequacy the approach which interprets the history of economic theory primarily as a gradual improvement and refinement in the tools of economic analysis (Schumpeter), as well as the approach which sees economic theory primarily as the rationalization of class and group interests (Marx, Roll, Myrdal). He acknowledges truth in both these points of view and to a degree incorporates them into what he considers a more comprehensive interpretation of economic doctrines.

In the age in which economic theory in Professor Heimann's sense arose, man understood himself in terms of a philosophy of the natural harmony of the universe, and from this was derived the idea of a "natural" economic order. Thus the eighteenth-century conception of nature as rational and bountiful is said to account for the optimism of Adam Smith. Although allegiance to a natural order continued into the nineteenth century, the newer view interpreted nature as irrational and niggardly, and in terms of this Professor Heimann explains the pessimism of Malthus and Ricardo. The shift in the nineteenth century from natural science to history as a methodological guide in man's understanding of himself enabled the socialists to blame social institutions rather than human nature for the evils of society and opened the vista to revolutionary programs of social reconstruction.

Quesnay and Smith were both products of the same age and both believed in the tendency of the world toward pre-established harmony, but they did

not employ the same techniques of analysis. Quesnay's circular flow theory is modeled after laws governing biological organisms, which are subject to functional disturbances. From this beginning there developed the modern theories of functional disturbance, *i.e.*, of economic fluctuations. The followers of Adam Smith modeled their principles of economics along mechanical lines, which, according to Heimann, made it impossible for them to develop a theory of functional disturbance and economic crisis (p. 92). It may, however, be observed that Malthus' ability to break away from the mechanical price theory of the classicists to a type of circular flow theory suggests that method may be less of an independent variable than Professor Heimann contends.

Although Professor Heimann considers class and group bias in explaining economic theories, the handling of this aspect of his approach is such as to minimize its importance. To take one example, his discussion of Ricardo completely ignores the vital role of the corn law controversy in shaping Ricardo's theory of distribution. Professor Heimann is eager to exonerate Ricardo from the charge of being an apologist for capitalism, and rightly so, although Ricardo's intellectual integrity hardly needs defending. It would have been enlightening, nevertheless, to have noted that Ricardo's advocacy of repeal of the corn laws was a program favored by industrial capitalists and opposed by the land-owning interests. As Wesley Mitchell has pointed out, Ricardo's theory of distribution gave theoretical expression to the practical question whether "the power of the state should be used to maintain the high incomes of the farmers and landlords, or whether the import duties should be reduced to safeguard the interests of manufacturers and merchants" (*Trend of Economics*, pp. 5-6).

A disturbing aspect of Professor Heimann's approach to the history of economic doctrine is the failure to deal systematically with the criteria of validity of economic theories. He states at one point, "There is, then, no way of avoiding the uncomfortable conviction that . . . the propositions of economics are unverifiable and irrefutable" (p. 20). Literally interpreted, this means that economics cannot hope to be a science since confrontation of theory with the facts of experience is the prime requisite of scientific inquiry. One wishes Professor Heimann had given more consideration to the nature of the appeal to facts in testing the validity of economic theory. In a forthcoming posthumous volume on the history of economic theory the late Professor Rogin develops the thesis that the appeal to facts in economics cannot be made directly from formal theory, but must be made indirectly by appealing to facts through practice, that is, through the practical policies associated with a theory.

In part, Professor Heimann avoids the problem of validity by defining economics as a purely technical branch of knowledge, thus removing questions of policy from economics and placing them in the realms of politics, morals, and philosophy. Since economics is essentially formal, it tells us nothing about the relative merits of various institutional practices. Viewed in this manner, there is, for example, no *economic* issue between capitalism and socialism—the issue is not even political according to Professor Heimann,

but moral (p. 176). By shunting nearly all important questions of policy into other fields, economics is reduced to an insignificant role in the affairs of men. Economists who wish to say anything about policy do so not as economists but as moralists.

In spite of shortcomings, Professor Heimann has made a valuable contribution to the literature on the history of economic doctrine.

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Einführung in die Wirtschaftstheorie. I. Teil, *Theorie des Wirtschaftskreislaufs.* By ERICH SCHNEIDER. (Tübingen: J. C. Mohr [Paul Siebeck]. 1947. Pp. vi, 82. RM. 3.)

Taking advantage of the fact that the theories of price, money, business cycles, public finance, and business economics have recently been integrated into a unified, comprehensive economic theory, Professor Schneider has undertaken the task of presenting a new *Einführung in die Wirtschaftstheorie* (Introduction to Economic Theory) in three volumes. The first volume, entitled *Theorie des Wirtschaftskreislaufs* (Theory of the Circular Flow in the Economy) is now before us. Volume Two will treat of the Theory of the Economic Plans of Households and Firms; Volume Three, of the Theory of General Equilibrium, Money and Employment.

Professor Schneider emphasizes that we cannot understand economic processes if we stop at the visible, objective manifestations of economic conduct; and that we must go back to the individual economic plans (of households and firms, and sometimes governments) which are behind them. Yet, the theory of the individual plans is postponed for the second volume. In this organization, in devoting the first part of his work to aggregative analysis, Professor Schneider follows the example of recent English and American economic texts.

Making the twofold distinction between production plans and consumption plans, and between plans freely made by individuals and plans made by central authorities, Professor Schneider, in the first chapter, sketches four "pure" types of economic systems, and then proceeds to the analysis of the free-exchange (individualistic) economy. In the second chapter he shows how the financial statements of individual households, firms, banks, and governments can be consolidated in a "national wealth" account for the economy as a whole.

The core of Professor Schneider's analysis is in the next three chapters, dealing with the economic process in a *closed* economy *without* government activity (Chap. III), in an *open* economy *without* government activity (Chap. IV), and in a *closed* economy *with* government activity (Chap. V). These are, in the main, variations of the Keynesian themes that Saving equals Investment (Chap. III), that Saving equals Domestic Investment plus Export Surplus (Chap. IV), and that Saving equals Private Investment plus Budget Deficit (Chap. V). These main themes, however, are developed in an original way and harmonically combined with subsidiary themes.

The "macro-economic equations" are derived from the income accounts

of individual households and firms. Schneider begins with the accounting system of an individual firm and demonstrates the entries that are made in the books of the firm for each of the six "steps": payments, purchases, costs, production, sales, and receipts (p. 32). He takes the reader through the accounting procedures of the firm in order to lead him gradually to the consolidated national income account. This is an excellent procedure because, among other things, it can clarify, in one pedagogic sweep, as it were, a number of different concepts: gross income, gross investment, depreciation, net income, net investment, value added by manufacture, personal incomes, etc. Unfortunately, the formulation by Schneider is not quite satisfactory, because the exposition of accounting techniques is not sufficiently lucid. Without previous training in accounting, students will hardly be able to follow the argument closely enough to comprehend thoroughly all relevant relationships.

Professor Schneider mentions (p. 53) that all his macro-economic equations reflect merely the flow of goods and services, but not the flow of money; they reflect purchases and sales, but not payments and receipts. He also mentions repeatedly (pp. 47, 49, 52, etc.) that the quantities involved are *ex post* and that the equations therefore do not represent statements of causal relationships. But these warnings are probably more than neutralized by formulations which suggest causal or functional relationships. For example, the equation "Total Income of Entrepreneurs is *equal* to Total Investment *minus* the Saving of Non-entrepreneurs *plus* the Consumption of Entrepreneurs" is called an "especially important relationship" (p. 51) and the conclusion is drawn that the income of entrepreneurs will be higher the greater the amount of investment, the greater the consumption of entrepreneurs, and the smaller the savings of non-entrepreneurs. How many students will avoid the impression that any changes in *any* of the terms on the right side of the equation must *cause* the income of entrepreneurs to change accordingly?

Similarly misleading formulations appear in the analysis of fiscal policy. It is stated, for example, that "the total amount of direct taxes paid by entrepreneurs is irrelevant for the total amount of income of entrepreneurs" (p. 73). Two definitions had preceded the analysis: (1) business taxes were included in "direct taxes paid by entrepreneurs" and (2) taxes were included in the "income of entrepreneurs" (pp. 70-71). In other words, this income was meant to be what we usually call "income before taxes." Does it then take any "proof" to "conclude" that the amount of taxes is irrelevant for the amount of income? But if we are to reach this conclusion from a series of equations, is it not almost inevitable that the reader forget the definitions and attach policy implications to the result? On the same page Dr. Schneider deduces from his equations that "an increase in the budget deficit by a given amount will, *ceteris paribus,* automatically result in an increase of the total income of entrepreneurs by the same amount" (p. 73). How many students will remember that statements of this sort are supposedly without causal significance and, hence, should not be directly applied to questions of economic policy?

The best passage in the book, in my opinion, is the exposition of the relationship between micro- and macro-economics. Since the book is not available in English, I believe I am justified in supplying here a free translation of the essential parts of the passage (pp. 54-55).

"In principle the actual course of the economic process is determined by the decisions and conduct of the individual economic units [the individual households and firms]. Any analysis of the economic process, therefore, must go back to the acting economic units. . . . It is possible in our theory to comprehend the course of the economic process as a result of the interaction of the decisions of the millions of small economic units in the modern economy. Indeed, only in this way can we obtain a really clear insight into the relationships determining the course of the economic process. . . . The number of relationships, however, which enter into such a micro-economic analysis of the total economic process is obviously so large that such a theory, with its implied attention to detail, is difficult to use for practical purposes. Economic policy needs easily comprehensible relationships between quantities which are few in number and essential for steering the economic process. For this reason it is necessary to reduce both the number of the quantities determining the course of the economic process and the number of the relationships between these quantities. We can do this if we aggregate the single economic units into large groups appropriate to the setting of the problem to be dealt with and confine our analysis to the relationships between these groups as supposedly homogeneous economic aggregates. . . . In this fashion we succeed—especially in the study of monetary relationships—in obtaining a greatly simplified picture of the relationships relevant to the process as a whole. . . . Naturally, such a macro-economic theory leads to results which are less enlightening and more uncertain than the results of a theory designed to explain the relationships between the smallest economic units. The significance of the results of a macro-economic theory and its quantitative reliability will be smaller the larger the size and the smaller the actual homogeneity of the groups with which the analysis operates. Nevertheless, macro-economic theory is simply indispensable for practical economic policy, because for technical reasons the individual households and firms are to a considerable extent beyond the reach of economic policy. Hence it is incumbent upon economic theory to make both types of analysis: a 'detail' analysis of the relationships between individual economic units and a 'bold-strokes-of-the-brush' analysis of the relationships between groups composed of individual economic units."

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Economics—Principles and Applications. By JAMES HARVEY DODD and C. W. HASEK. (Cincinnati: South-Western Publishing Co. 1948. Pp. vi, 728. $4.50.)

The authors of this introductory textbook belong to the category of educators whose objective is to appeal to the law of least resistance for sustained interest and effective comprehension of what economics is all about. The

central idea in this objective is to fit the presentation of materials to the intelligence of the average student, because what serves him "serves best the needs of all students." On this basis the students can get on "without much assistance from the instructor" who, it may be added, upon exacting attention might acquit himself of his stewardship by surprising everybody, including himself and the registrar. To be sure there is nothing amiss about the law of least resistance provided that the consequent law of large numbers does not involve a probability of self-deception. The accountancy of physical phenomena does not lend itself to social relationships, in which respect a tough proposition calls for a tough discipline.

The text is not organized on the analysis of the income approach, but follows the orthodox set-up. It starts with the nature and scope of economics and social organization, largely in an historical setting. Part II deals with a descriptive amplification of production of wealth and income and is followed by consumption of wealth and income. The next three sections deal with money and credit; value and price; and the distribution of national income. The last 250 pages are allotted to problems of labor-management; other economic problems, *i.e.*, business cycles, economic security, agriculture, war economy, international economic relationships; economic significance of government; and the challenge to American capitalism (socialism, communism, etc.)

There is no doubt that the authors have accomplished what they set out to do. They have been painstakingly meticulous in delivering a painless job for the student and a thoroughly commendable job for the registrant. Anything of this sort must necessarily involve an easy-going vocabulary, so that the fundamental economic tendencies can "be presented in as nontechnical form as possible." That is what is said in the preface, and there is no doubt of its superior negotiation. The presentation is further facilitated by numerous photographic reproductions of industrial and trade activities, historical charts, maps, several of the simplest of analytical diagrams, and questions and problems and suggested readings appended to each chapter. It all adds up to a well-lubricated delivery and may be considered an innovation for the instructor and students who, the publishers say, "have heard rumors from others that this book is really teachable and understandable."

Among the introductory chapters that deal with institutions in their historical and behavioristic aspects, the weakest ones are on the Evolution of the Economic Order, Mercantilism, and Capitalism. What strikes one foremost about these chapters is the retilling of shallow tracts that should have had the benefit of contributions of the Max Weber-Talcott Parsons-John U. Nef scholarship. The fellow who reads these sections will really get little that is decent about the genesis and evolution of capitalism. He will get very little about the fundamentally propelling impulses that underlie economic freedom and the transformation of economic institutions. Capitalism is not synonymous with the era of great inventions as the authors seem to indicate; nor can it be said that the great inventions occurred with the explosive force of mid-eighteenth century new departures. A brief survey of the industrial revolution should, at least, make mention of the intellectual de-

velopment of the period of the Reformation and Renaissance that exerted a great stimulus upon the natural sciences and technology, and of which the era of significant mechanical inventions is a subsequent development.

The authors' contention that "with reference to matters economic, prices are all important" is found wanting in a variety of price problems and analytical processes that serve the student as a foundation and as an instrument of refined and ultimate calculation and comprehension of price changes. Only one hundred pages are given over to value and price, of which about forty deal with government-controlled prices, and prices and the value of money. This last topic includes a two-page summary of the income theory of John M. Keynes. Admittedly, the sophomore will get a smattering of price theory and some of the underlying facts involved, but, as well, he might find himself in a state of bewilderment should he become ambitious and tackle some of the suggested readings. Again, the unfledged junior will take another look around should his curiosity urge him to dig somewhat deeper into the analysis of the distribution of national income. There is an amorphous mass of stuff here, especially on the theories of wages, interest, and profit that lacks the tooling of the marginal calculator and the principles of joint-cost relationships. An example of unconstrained detachment with which the analysis of the relations of profit to prosperity is rendered is the authors' application of Say's law of markets to the behavior of the business cycle in 1929 (p. 439). On the topic of loans it is held that government "is not limited as to the same means of repayment as is the individual, and it is not actuated by the feeling of personal need" (p. 421). Maybe it isn't! But as an unqualified account the statement displays an undisciplined temper about what the financial responsibility of government is.

The props for balanced production are to be found in the lessened inequality of incomes which rests on the quadruped of social insurance, control of monopoly, encouragement of small business, and better housing and education. We'll conjecture that it is to be an education in the Marshallian sense —that public money may flow freely "to educate character, faculties and activities . . . toward a wider understanding of social responsibilities of economic chivalry."

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Dictionary of Modern Economics. By BYRNE J. HORTON, JULIEN RIPLEY, JR., and M. B. SCHNAPPER. (Washington: Public Affairs Press. 1948. Pp. ix, 365. $5.00.)

The contents of this book are perhaps best summarized by its half-title: *A Handbook of Essential Information Concerning the Basic Terms of Business, Finance, Commerce, and Modern Economic Society.* Its purpose is "to assemble and coordinate—primarily for the layman and incidentally for the college student—reasonably broad definitions of those terms which cover the economic facts of life."

On the whole, the book accomplishes its stated purpose with a high degree of success. Containing some 3000 entries, the dictionary includes widely

diverse topics and terms in the fields of economic theory, statistics, money and banking, international trade, public and private finance, business organization and practice, labor, and related areas. Numerous acts of federal legislation (chiefly in the New Deal period) and a number of court decisions are listed and briefly described. Of interest to the specialist in economics—principally for purposes of convenient reference—are the biographical sketches of some 125 or more leading economists, living and dead, with an indication of their contributions to the history of economic thought. Numerous bibliographical citations appear in connection with the definitions of specific terms. Considerable factual information, some nonessential, much practical, appears between the covers.

As measured by a rough "marginal utility" yardstick, the book appears to satisfy the criteria of comprehensiveness and carefulness, particularly for a first edition. Such terms, unfamiliar to the layman, as forced saving, the multiplier, the acceleration principle, the various "marginal" concepts, secular stagnation, the propensity to consume, the different degrees of monopoly, etc., are treated with sufficient clarity and accuracy to be useful to the intended audience. No pretense is made to definitive treatment of the kind afforded by the Encyclopedia of the Social Sciences, or required by the exigencies of a graduate curriculum in economics. Still, the bulk of the material has been prepared with sufficient care to satisfy the fastidious.

A few exceptions may be noted. On page 204, the "long and short haul principle" is defined as "an early practice among railroads by which a given shipment of goods would be carried a long distance at a lower rate than that charged for a shorter distance." By failing to add the words "over the same route" the authors have failed to identify the principle at issue; as the material stands, the statement and the related context are substantially incorrect. On page 325, one might wish for a more felicitous word, in a dictionary for laymen, than "justified": "Tariffs have been justified on the ground that they serve as means of national revenue, protect domestic industries, safeguard the wage level and standard of living [etc.]." A minor error appears at page 3 wherein the case of *Adkin v. Children's Hospital* is cited as involving the Oregon, rather than the District of Columbia, minimum wage law.

Suggestions that the book may be lacking in terms of balance are found at various places; *e.g.*, "producer's surplus" is defined, but the more common "consumer's surplus" is omitted; "substitution effect" and "explicit cost" are included but "income effect" and "implicit cost" do not appear (although the latter is given as the definition of "imputed cost"); a minor federal agency such as the War Damage Corporation is listed, but the War Production Board is overlooked. A more substantial criticism is the spotty listing of federal court decisions. The eighteen or twenty cases cited, virtually all concerned with labor, are hardly representative of the major decisions of the Supreme Court affecting the American economy. (The usefulness of the list, especially for purposes of citation by the user, would be improved by including the volume and page number of the decisions.)

But these defects are for the most part minor, and are far outweighed by

the successful treatment of a multiplicity of commercial, financial, and business terms and institutions. The book is a welcome addition, and it should find wide use among businessmen, government workers, journalists, librarians, and others in need of a convenient reference manual in the field of economics. The authors are to be congratulated for their courage in undertaking a formidable task, and for their willingness to make currently available the fruits of their efforts at the risk of offense to sterile perfectionism.

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General Education in the Social Studies. By ALBERT WILLIAM LEVI. (Washington: American Council on Education. 1948. Pp. xvii, 336. $3.50.)

This volume is one of four reports of the Cooperative Study in General Education which the American Council on Education in collaboration with various colleges undertook with a view to exploring the possibilities of improving existing programs of general education. It derives its value and its practical usefulness as a source of suggestions for other colleges and universities from the fact that it describes in a very detailed fashion how some colleges approach the problem of setting up a two-year basic integrated course in the social studies; it also contains a helpful course outline as well as an extensive reading list. Beyond these practical features, the report provides a stimulating discussion of the general philosophy and assumptions which underlie the current emphasis on general education in the organization and planning of the undergraduate social studies curriculum. As such, it carries an important message to those economists who as specialists in one of the social sciences still view with skepticism this important trend in American education which seems to sweep the country like wildfire.

"The primary objective of curriculum planning in the social studies is to give an integrated and comprehensive picture of the nature of modern society" (p. 226). The traditional social science curriculum is said to have failed in this respect precisely because of its departmentalization. "Competing courses in history, sociology, political science, economics, anthropology, psychology, and geography exist side by side making their claims for student acceptance without any realization of the coordinate role which they play in the understanding of the social order as a whole" (p. 223). This failure of each isolated discipline to provide an understanding of the whole of society is in peculiar conflict with the presuppositions of a democratic society. Responsible participation in the democratic way of life depends upon an understanding of the social order as a whole as well as on the promotion of habits of democratic living, neither of which is achieved to an appreciable degree by isolated specialized studies. Even if specialized terminologies and techniques of analysis had not heightened the difficulties of intercommunication between the isolated social sciences, the free elective system together with an inadequate counseling system would in themselves be sufficient to defeat the attainment of a continuous and integrated general education in the social sciences. These are the considerations which seem to inspire the current emphasis on general education in the social studies which

found its earliest expression in the Columbia Contemporary Civilization course and which has now assumed the character of well established two-year integrated basic courses in numerous other colleges and universities.

The present report goes, however, far beyond the point of setting forth the general philosophy of the social studies program. It raises a host of detailed questions concerning the organization, content, administration and teaching of the program. Among these questions are the following: What is the proper approach in setting up the comprehensive social science course? Is it the historical approach, the problems approach or a systematic approach; or a combination of these three? Is the course to be conceived and planned as terminal, transitional or introductory and exploratory experiences in general education? At which time during the period of a four-year college education should the course be given? Should it be a free elective subject or should it be required of all students? Should the course be taught by one instructor or should the various parts be handled by different specialists?

According to the author, the best method of integrating the social studies for the purposes of providing an integrated picture of the nature of modern society is the conceptual scheme of cultural sociology and cultural anthropology. This broad conceptual scheme is believed to provide not only the most satisfactory combination of the three possible approaches mentioned above but determines also what constitutes the indispensable knowledge in the social studies and hence the indispensable content of the social studies course as it is conceived by the author of the report. This broad frame of reference which makes it possible to draw upon the results and techniques of analysis of all the social sciences leaves sufficient room for placing special emphasis on problems which at any given time seem to require special emphasis in the light of the needs of the students in each local situation. (One of the most original suggestions of the report which in fact is presented in such detail that it takes up a major part of the volume is the elaboration of an inventory of social beliefs and attitudes among students designed to reveal areas of special prejudice and bias on such problems as the public debt, labor relations, minority questions, etc.)

The report conceives of the social studies course as a terminal experience (that is, not preparatory or transitional to specialized work) primarily because it is thought that the demands of specialized work must be a matter of secondary rather than primary consideration in the light of the philosophy of general education. It considers the social studies program as a really cooperative enterprise of the social science faculty; as such, it should be constructed, taught and administered jointly by all within the division of the social sciences. It should be taught as a continuous course by one instructor and any attempt to turn over its constituent parts to the sociologist, the historian, the economist and the political scientist should be resisted. As an integrated course designed not only to convey the "indispensable knowledge" on the nature of the society we live in but also to develop a considerable degree of study skills, of critical thinking, and of attitudes indispensable for living in a democracy, the social studies program can not be a free

elective subject but should be required of all at the general education level of the American college.

The reviewer's criticism is not concerned with the basic philosophy of the social science program. On the contrary, I wholeheartedly concur with the view that the traditional social science curriculum conveys only a fragmentary and hence an inadequate and misleading picture of the society we live in. Because of these convictions it appears to me that the author takes it too easily for granted that the social studies course must be conceived as a terminal experience at the college level and cannot be planned as a transitional course to the specialized work which is to follow. I believe that this is due largely to the special approach favored which seems to neglect unduly the study of original source material and of the growth of ideas, basic concepts and theories in terms of which man has attempted to interpret the social and economic reality of his time. As far as the transition to specialized work in economics is concerned, it is easy to see for example that social studies programs which include the reading of original source material from the writings of let us say Thomas of Aquinas on just price, the mercantilists on the balance of trade and the effect of precious metal, Adam Smith, Ricardo, Malthus, Schmoller, Marx, Veblen, W. C. Mitchell, Beveridge, to name only a few, would provide a fruitful preparation to the more specialized work for the economics major. I am sure that the same applies to other disciplines.

The fact that such an approach would necessitate an adjustment of the traditional economics curriculum and that very little has been done to this effect even in institutions which place greater emphasis on original source material and the historical approach does not defeat our argument. The trouble lies rather in the fact that only a small group in each department is called upon to participate in the social studies program and that as a result the majority of the members never acquire a first-hand insight and interest in the subject matter of the course and hence are unable to judge its potentialities as an introduction to their own specialized work. As far as the transition to specialized work in economics is concerned, probably the best stepping-stone would be provided by a course in the history of economic thought offered concomitantly with a basic principles course in the junior year. Doubtless a survey of alternative approaches to the organization of social studies programs and a detailed evaluation of social science courses in existence at other institutions would have provided a clue as to how this transition from general to specialized education might be achieved to the mutual advantage of both. It is to be regretted that the cooperative study in general education did not devote any attention to such a comparative evaluation of existing general education programs in the social studies; such an evaluation remains one of the most important needs at this time when the whole problem of social studies courses is under scrutiny by colleges and universities which so far have introduced such programs only on an experimental basis.

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Economic History; National Economies

The Development of Southern Sectionalism, 1819-1848. By CHARLES S. SYDNOR. Vol. V of *A History of the South,* edited by W. H. Stephenson and E. M. Coulter. (Baton Rouge: Louisiana State Univ. Press. 1948. Pp. xii, 400. $6.00.)

The South During Reconstruction, 1865-1877. By E. MERTON COULTER. Vol. VIII of *A History of the South.* (Baton Rouge: Louisiana State Univ. Press. 1947. Pp. xii, 426. $5.00.)

With the justifiable pride that accompanies distinct achievement, Louisiana State University and the University of Texas have launched their new series in the *History of the South.* The initial volumes by Charles S. Sydnor and E. Merton Coulter provide ample evidence that a major contribution to American historiography is in the process of completion. As a work of synthesis, drawing upon the findings of countless individual monographs and primary sources, this series will offer a valuable tool to many scholars interested in regional developments.

Adhering to the general method utilized in previous multi-volume cooperative projects, the editors have contemplated a ten-volume series, entrusting the responsibility for each study to a capable specialist in some period of Southern history. Although the division into time units occasionally may seem to be arbitrary, since the forty-one years covered jointly by these two volumes receive as much space as the entire colonial period, one cannot deny that standards of current interest, and, to a lesser degree, the availability of source material, virtually determine the emphasis.

The years which were assigned to the present authors are certainly of crucial importance. The vindictive and unfortunate Reconstruction era was largely the consequence of bitter sectional antagonisms that had developed during the preceding generation. A reading of Professor Sydnor's book affords an opportunity to understand how the South came to assume an increasing attitude of local self-consciousness. In explaining the transition from nationalism to sectionalism, the author stresses the gradual reduction of Southern influence that occurred between 1819 and 1848. "At the beginning of the period under review," we are told, "Southern politicians and statesmen well-nigh dominated the Federal government; before it was ended they had seen their region decline to a subordinate political position." While the interpretation may at times underestimate the continuing influence of Southern leaders in high national office and the voice of the Southern wing of the Democratic Party, the chapters on political sectionalism, "Regionalism in Mind and Spirit," and "Party Allegiance or Sectional Patriotism?" provide splendid insight into the real and occasionally fancied grievances of the South. This defensive position was eventually restated as a positive affirmation of the virtues of slavery and the plantation economy.

In *The South During Reconstruction,* Professor Coulter's work, this trend is likewise in evidence. Reacting against the physical devastation of the war and the policies of Congressional Reconstruction, the latent resentment of the South crystallized in the activities of the Klu Klux Klan. Quite legiti-

mately the author observes that the poor whites, with whom the Negro had traditionally come into economic competition, were "at the bottom of nearly every assault and battery on the freedman." However, the apparent admiration for the Klan's "artistic" and "humorous" techniques, which achieved "remarkable results" through "cleverly organized" intimidation, sometimes colors the account. Considerably more satisfactory is the description of the methods of social and economic ostracism that were employed to stamp out the vestige of white radicalism. By 1877, as a result of southern resistance and the emergence of moderate national leadership, the former Confederate states were in a position to resume their standing in the Union. The radical version of Reconstruction, in the opinion of the author, had proved to be a dismal failure.

In allowing a comparison of the South's economic status before and after the War between the States, these volumes are especially useful. During both periods the South was vulnerable to the consequences of sudden depreciation in the price of cotton, invariably the chief money crop. Although the economy in each instance was identified with rural society, Professor Coulter points to the growth of urban population during the decade which began with 1860. Its relationship to increased industrialism was generally valid, in spite of the fact that the Carolinas and Georgia, whose urban growth was less than the national average, progressed considerably as manufacturing states. Nevertheless, the account gives the dubious impression that no Negroes worked in the cotton mills because they were incapable of attending to the looms with efficiency. Certainly this interpretation fails to take cognizance of the successful prewar experiment with Negro labor conducted by the Suluda River, South Carolina, textile factory. Nor does it consider the obstacles to Negro employment which were created by the hostility of white labor and the various state license requirements that confronted the freedman seeking non-agricultural work. Similarly, Dr. Sydnor's book, in its attempt to stress the predominance of agriculture, perhaps underestimates the significance of Southern manufacturing as a whole. In maintaining that there were only about 100,000 persons engaged in Southern manufacturing at the time of the Census of 1820, the approximation tends to overlook the large numbers of slaves who were trained in plantation handicrafts. These occupations were not listed in most census reports, but they are too important to be ignored. However, the author has honestly acknowledged that he is aware of the imperfections of the early tabulations, and "is using the census without interpolating warnings and cautions" only because of a scarcity of better source of information.

Each of the writers also considers the significant question of Southern economic vassalage. Although he recognizes that New York's merchants as early as 1822 had "secured most of the business of handling goods that went south in exchange for Southern staples," Dr. Sydnor repudiates the notion that the South's export trade was really under external domination. Even during the 1830's there was little more than oratorical criticism of alleged Northern interference with the direct trade relations between the cotton states and the rest of the world. To Dr. Coulter, on the other hand, the

problem seems far more acute. Speaking of the long-standing dependence upon the North, he maintains that the situation became even more malignant during the era of Reconstruction. The subject of plantation ownership and investment by absentee Northern capitalists receives special attention, though it is largely slighted in the other book. And yet the problem is of major consequence if one is to understand the motives of the secessionist element in New York City during the Civil War.

A further comparison of the two volumes demonstrates that Professor Coulter, to a greater extent than his colleague, has concentrated upon the internal condition of the South, deliberately ignoring many simultaneous federal developments. Thus even the Congressional debates over Southern Reconstruction receive only abbreviated attention. In Dr. Sydnor's study the national policies affecting the South, such as the Missouri Compromise, the presidential elections, and the Nullification movement, are explored with more adequate detail. The key to this difference perhaps lies in the fact that the South had taken an active part in the ante-bellum politics of the nation, whereas the years immediately after the war witnessed a period of substantial eclipse.

In general, the two books adhere to the same method, providing scholarly and well-written evaluations of Southern life. Both works seek to achieve a balance in the various questions selected for discussion, offering appraisals of such widely divergent topics as transportation, agriculture, local government, education, and social theory. The bibliographic essays contain useful commentaries on the extant manuscript and printed sources. While the interpretations of native Southern institutions are relatively uncritical, this series, when completeu, will provide our basic storehouse of information about the region for many years to come.

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New Paths for Japan. By HAROLD WAKEFIELD. (New York: Oxford Univ. Press. 1948. Pp. viii, 216. $3.75.)

Since the opening phases of the occupation of Japan the problem of economic policy has been one of foremost consideration by the Allied authorities. Initial methods of adjusting the economy of Japan to a modern, peacetime social system followed a generally non-conservative pattern. In recent months, however, economic policy for Japan has undergone significant changes bordering on more moderate principles. There is under way a testing of the relative empirical values of given sets of principles and policies in relation to the peculiarities of Japanese society.

New Paths for Japan, a sequel to the Royal Institute of International Affairs, Chatham House Study Group report, *Japan in Defeat,* is an attempt to clarify many problems of economic policy. It has an added value to American economists interested in Japan because it represents the thinking and interpretation of a British authority. The book is concerned in several

sections with descriptive political material, but this is supplementary to concise treatment of economic matters. The various trends resulting from the application of respective economic policy can be traced clearly.

The subject matter of the chapters on the prewar economy of Japan is adequately developed for the purpose intended. Some exceptions, however, may be noted. For example, the policy of Finance Minister Takahashi Korekiyo in *de facto* depreciation of the yen in 1931 is viewed as a financial achievement, without indicating that such a policy actually increased the cost of Japan's imports and caused the terms of international trade to shift against her. The depreciation of the yen was successful for Japan only in that she was able to create foreign exchange holdings for imports of war materials, and this was largely supplemented by a series of stringent exchange controls after May, 1933. As for the statement by the author that the foreign exchange rate remained stable between 1932 and 1936, it is assumed that the period following October, 1932 is meant, as the first ten months of 1932 experienced the greatest fall of the yen on the exchanges. There is, however, evidence of the correctness of the author's view that the yen was not deliberately undervalued after 1931 in that the *de jure* act of Japan's divorcing gold and the yen externally was reflected on the exchanges as the yen floating to its own level in relation to other currencies. The decline in the exchange value of the yen occurred mainly because of *anticipation* of internal depreciation, which was not manifest in price indices or latent in increased note circulation.

A development of the economy of Japan at war involves the author in a controversy regarding the idea that Japan based her war economy on the assumption of an early and complete victory. His principal opponents in this controversy are the *Report of the U. S. Strategic Bombing Survey* and Jerome B. Cohen, "The Japanese War Economy, 1940-1945," in the *Far Eastern Survey* (December, 1946).The latter indicate that the gross national product, adjusted for price change, rose some nine billion yen from 1942 to 1944, indicating a belated production effort upon realization of extended warfare. The author makes a convincing point that actual production indices of basic industries refute the theory embodied in the *Bombing Survey*, not to mention the fact that the national product devoted to war production increased only in a near-direct proportion to an absolute fall in consumption. It would appear from the evidence presented that complete reliance cannot be placed on the *Bombing Survey*, inclusive as that study is, as a basis for interpretation.

The final three chapters contain material of the greatest interest to economists concerned with problems of policy in the occupation of Japan. The author does not hesitate to take issue with established policy when his observations seem to warrant it. An example is his reference to the initial exchange rate, pegged at 15 yen in relation to the dollar up to March 11, 1947, as being a "preposterous overvaluation of the yen." Comment on this point is necessarily restricted to the fact that overvaluation and undervaluation of exchange rates, with specific reference to possible effects on trade, are

relative terms; so-called overvaluation, *per se*, does not necessarily retard exports. Moreover, as dollar-yen purchases by United States personnel were practiced in the initial stages of the occupation, an overvalued rate tended to be anti-inflationary. The adjustment of the rate to 50 yen to the dollar following March 11, 1947 has presumably relieved the author somewhat, although the matter of pegging the rate until some measure of price stability in Japan can be effected remains a problem to the authorities.

Redistribution of wealth in Japan is treated within the broad scope of general economic policy. The social systems represented by the governing Allied Powers—America, Great Britain, and Russia—are presented as three broad courses for acceptance by the Japanese: namely, free enterprise, social democracy, and communism. The author indicates that the course of free enterprise is the least likely to be adopted, and, moreover, would be undesirable, since it would lead to the development of new monopolies and would be unacceptable to organized labor. The alternative course is suggested as that of social democracy, along with the usual arguments of state ownership of principal industries in Japan.

The idea of socialism as a core of the future economic system of Japan would seem to be the antithesis of a fundamental aim of security in the Far East. Socialism for politically immature peoples is likely to be the first step toward communism. There is no reason to believe that new monopolies will arise, contrary to the basic policy of the Allied Powers. Such reasoning places no faith in future leaders of Japan, nor in antitrust measures and their enforcement. The fact that free enterprise would not be acceptable to Japanese labor leaders is hardly an argument, in itself, against liberal capitalism in its true sense. The real problem for free enterprise in Japan, as the author seems to suggest, is that concerned with demand for private capital. This problem presents itself as a result of severe treatment extended by occupation authorities against former entrepreneurs. If free enterprise is to emerge the victor in the struggle the author describes, provision will have to be made to encourage foreign investment on a wide scale, especially in the closing phases of occupation and the initial period of post-occupation.

Irrespective of any political overtones, this study represents a definite contribution to current economic literature; especially so because it is the work of an established, prewar authority on Japan. As such, it should find wide interest among those economists who specialize on the Far East.

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Academy of World Economics
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Political Economy in the Modern State. By Harold A. Innis. (Toronto: Ryerson Press. 1946. Pp. xix, 270. $4.00.)

This volume by the head of the department of political economy of the University of Toronto is a reincarnation of a number of papers on a variety of subjects which have been buried too long in such esoteric tombs as the *Queen's Quarterly* and the *Transactions* of the Royal Society of Canada.

They now become available to a wider audience of students and scholars, both of whom will find much here that is both illuminating and rewarding.

Professor Innis is not the kind of scholar who labours mightily for a generation only to produce a single massive volume in which a well-masticated text rests neatly on top of an orderly pile of footnotes which support the slender edifice. Here, to change the metaphor, is economic history on the wing. The author ranges across the facets of a series of ideas, dazzling the hard-working reader with strange lights and novel perspectives. The chase is arduous, but rewarding. Most of the essays concern economic theory and political science. They emphasize the significance of the title—the essential oneness of the social sciences and their importance to one another and to mankind.

The papers fall into two main groups: the first of which is economic history, and the second, the place of the university and especially of the social sciences in political society. The opening pair—the brilliant "The Newspaper in Economic Development" and the somewhat less successful but nevertheless stimulating "An Economic Approach to Literature in the Nineteenth Century"—show how much economic history can contribute to the study of letters and to the evaluation of the political significance of literature. Related to these are three other notable contributions to economic history. "The Penetrative Power of the Price System," "Liquidity Preference as a Factor in Industrial Development," and "Unused Capacity as a Factor in Canadian Economic History." The second group is concerned with the role of the university and its main theme is stated in two sombre and thoughtful essays, "A Plea for the University Tradition" and "The University in the Modern Crisis." The remaining six essays are slighter and their themes are pendant to the main groups mentioned above.

Since reviewing space is a scarce resource, it is necessary to discuss only those aspects of Professor Innis's essays which seem to demand special attention. It is unnecessary—as well as presumptuous in a reviewer who is not an economic historian—to discuss the contribution of this volume to economic history. The author's reputation is established and the titles of the essays on economic history will be guidance enough to his fellow scholars in that field.

Their significance as economic history by no means exhausts the importance of the first group of essays. They are valuable contributions to an understanding of Canadian political development. They abound in arresting and fruitful generalizations about Canadian political behaviour and the nature of Canadian federalism. Where he says "Confederation as an instrument of steam power has been compelled to face the implications of hydro-electric power and petroleum" (p. 247), he is providing the key to the whole inter-war problem of Canadian federalism. These are not merely expansive half-truths. The staple approach to economic history in a country whose history is almost entirely economic is an excellent tool of political analysis. For over a generation the understanding of Canadian politics was befogged by the monopoly of the study of political science by a school of

historians who knew no economics and who had been fatally stricken in youth by the apt but analytically unfruitful analogy between Canada in the eighteen-forties and England under the second of the Stuarts. What we know of the Canadian federal system is due almost entirely to the labours in the last twenty years of Professor Innis and his disciples in the field of economic history. The first major result was the balanced and sensitive account of Canadian development from Confederation to the end of the inter-war period contained in Book I of the *Report of the Royal Commission on Dominion-Provincial Relations*. This volume of essays yields a rich stream of seminal ideas to the political scientist.

Professor Innis reveals here also his preoccupation with the major problems of politics. When he says (p. 70) "We have most to lose from encroachments of power. 'Power is of its nature evil, whoever wields it.'", he shows a concern with politics which is common to many economists. This problem is a real one which requires hard and rigorous thinking. But too many economists, among them Professor Innis, take too simple a view. The economic theorist is impressed by the impersonal beauty of the price system. It achieves regulation and order without apparent use of compulsion or limitation of the free will. When the economist turns to politics, he is appalled at the imperfect and unstable competition of parties, at the extent to which the lack of homogeneity of ideas leads to a corruption of the market. Somehow, the group engaged in the maximization of power looks far more ominous than the individual firm engaged in the maximization of its returns.

In point of fact, political power is no more inherently evil than steam power. Each is capable of physical hurt in the wrong hands but both are constructive forces in human life. The economist forgets that a solid base of political power is necessary to enforce the rules of contract and protect the sanctity of property which underlie the free market. The economist is insufficiently aware that the growth of technology has produced the big business bureaucracy which rests on the same foundation of organizational principles as the bureaucracy of the state. The introduction of constitutionalism into the divine-right concepts of business organization is a problem of the first importance to economist and political scientist alike.

This is not to say that Professor Innis is unaware of this last problem. He examines it with deadly effect in his opening essay on the newspaper. But the economist's preoccupation with the market and the beauty of the price system have led him to state the issue not only incorrectly but in a form which can be exploited by the very commercial and political interests which, as he already points out, are exploiting the universities and the social scientist. He says (p. 75) "Business and political exploitation of universities by bribes reflects a complete inability to understand that universities honour donors and not donors universities. The impression that universities can be bought and sold, held by business men and fostered by university administrators trained in playing for the highest bid, is a reflection of the deterioration of western civilization."

Through these essays run certain common themes: a recognition of the relevance of economics to an understanding of politics and of culture, the tremendous pressure exerted on cultural survival by the multiplication of mass media of communication faster than they can safely be assimilated, the difficulty of objectivity in the face of the mechanical obstacles thrown up by modern technology. It is an attempt to suggest the cost to civilization of overspecialization.

A marked evolution in style is noticeable in this volume. The essays are not arranged chronologically in the order in which they were written but more sensibly by means of subject. The later chapters are on the whole the earlier in time. They are markedly less allusive, there is less of the mordant irony of the later essays. The later ones possess in places a lack of intelligibility, an almost sibyline character, which suggest the growing urgency with which these problems are pressing on the author. They reflect too, no doubt, the increasing strain which the war and postwar load of teaching and administration has thrown on senior scholars and reveal how much we may be paying in loss of leisure and loss of time to think things through. One wishes that we may be allowed again the product of systematic and sustained scholarship but we are lucky to have even the overtime reflections of such a distinguished scholar.

J. R. MALLORY

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Hawaii—A Century of Economic Change, 1778-1876. By THEODORE MORGAN. (Cambridge: Harvard Univ. Press. 1948. Pp. xi, 260. $4.00.)

The need for an understanding of the culture of the Territory of Hawaii has become doubly important in view of the recent measures taken to grant it statehood. Professor Morgan has made a careful analysis of the evolution of the Hawaiian economy from the native feudalism which Captain Cook found in 1778 to an agricultural and commercial private enterprise system.

While Professor Morgan writes as an economist, he never loses sight of the highly important socio-economic aspects of the transformation in the period of Hawaiian economic history which he covers. He points out that the study of Hawaii is "an extreme case where the optimum rate of technical progress is far less than an 'economic' analysis only would recommend, for against the increase of real income is to be debited social costs of adjustment."

After a discussion of the original colonization, land division, tenure, reforms, and the breakdown of feudalism, the reader's attention is focused on the Reciprocity Treaty with the United States in 1876. There can be no doubt, according to Professor Morgan, that the interest of the United States in this treaty was primarily political. During a half century preceding the treaty, the Islands had considerable difficulty maintaining their independence amidst the maneuvering for commercial and political advantage of several nations. The treaty secured Hawaii against falling under the control of another power.

Economically, Hawaii gained free entry into the United States for a number of tropical products. The most important were sugar, molasses, and rice.

In exchange, Hawaii was to reciprocate by granting free admission to a number of American goods. The benefits to Hawaii from the Reciprocity Treaty, however, were dubious. The era after Reciprocity was one of great expansion. As was to be expected, plantation owners were encouraged to bring poorer land into cultivation, and cultivate more intensively land already in use by heavy applications of fertilizer and costly equipment. Hence, the bonus enabled planters to expand on a larger scale than would have been possible without a free market in the United States.

Against these advantages resulting from the Reciprocity Treaty were to be weighed the risk involved in making Hawaii dependent on a single crop, the tendency to concentrate control of the industry into a few hands, and the creation of new problems of social adjustment, particularly those arising from the growing heterogeneous population, a result of importing labor from other lands for work on the plantations.

Professor Morgan's timely study is an outstanding contribution. It should serve as a basic reference to those interested in understanding the economy of an area which is bound to become more important as the world economy becomes more interdependent. But perhaps what is more important is that this scholarly study gives a historical analysis of the transition of Hawaii from an underdeveloped economy having a relatively primitive marketing system to a sophisticated economy dominated by Western civilization. An understanding of this development should provide a worth-while frame of reference for dealing with similar problems in the underdeveloped countries whose people are becoming more conscious of their position in the world today.

The accelerated destruction of the indigenous social institutions of Hawaii provides an excellent example of the dangers of the sudden introduction of overwhelming alien institutions at the expense of the native culture. This poses the question of how to maintain the cohesive elements of the indigenous culture as new alien concepts are corroding the basic social pattern. The problem is one of maintaining a familiar cultural pattern in a viable condition until a new one can be sufficiently matured to take its place.

Fortunately, the invasion of the alien cultures upon the Hawaiian economy has been peaceful and without violent social upheaval. Hawaii's future is now bound to its plantation economy. The influence upon this economy of other alien ideologies plaguing the world (especially in the Orient) will be interesting to watch.

CHARLES D. HYSON

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Balkan Village. By IRWIN SANDERS. (Lexington: University of Kentucky Press. 1949. Pp. 291. $4.00.)

No economist who is interested in international economic policy or in the economics of "backward countries" could make a mistake in spending an evening or two in the leisurely reading of Irwin Sanders' *Balkan Village.* For this unpretentious little book has some profound insights to contribute to the understanding of the tide of events not only in the little village of Dragalevtsy but throughout the Balkans and with appropriate modifications

in China as well. It is based on a careful study of this Balkan village in the 'thirties and again in 1945.

Professor Sanders' book starts out in a personalized style, to present a picture of the socio-economic structure and life of a small rural village of Bulgaria in the 1930's. His style is in fact somewhat deceiving; for the work is a careful sociological study, free of the easy generalizations of the usual travelogue on the one hand and the pretentiously "scientific" work on the other.[1] One is struck continuously by the basic parallels between this Balkan peasant society and the Chinese peasant communities portrayed in such work as Martin Yang's study of a Shantung village and Fei's studies of villages in the south and southwest of China. The book would be worth reading on these grounds alone. Moreover, the chapters on the prewar period stand as the foundation on which the last chapters are built.

Nevertheless, what makes *Balkan Village* of particular interest to many of us must be the last three chapters of careful and objective analysis of the impact of the war and of communist influences in this peasant society. Even in the 'thirties the impact of nationalism with the increasing role of central authority in the village life was visible; but Professor Sanders represents this as still largely an external influence that was making only small impressions on the culture and mode of life. The people observed these developments as onlookers, accepting only what fitted into the traditional pattern of their lives. Such was no longer the case in 1945. The isolation from the culture of the "outside world" was already of the past.

How did the peasants react to the Germans, the Russians, the Americans and British in their midst? How did they react to communism as an ideology and a social system and how are these reactions changing? What are the cores of resistance and opposition to communism and do they tend progressively to weaken? What sort of alternative would be likely if communism does not ultimately dominate in full? What kinds of modification of communism are likely in view of the economic and cultural background of the people? What rôle does America play and what rôle might it play in the life of the peasant of a little village in the Balkans, or in the life of millions of peasant populations the world over? Professor Sanders is modest in his approach to these questions. But his work is notable for the objectivity with which he handles a subject so ridden with emotion everywhere. It is notable for the simple and yet profound insight into the underlying conditions and the nature of evolutionary (and revolutionary) developments. The more obviously analytical approach of the last part of the book rests firmly on the foundations of the earlier chapters and his conclusions flow directly from that background. No grand solution, no social blueprint is attempted. But the thoughtful reader will find much to give him pause.

MARY JEAN BOWMAN

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[1] The appendixes take up 58 of the 278 pages and enhance the value of the book. Four of these are reprints of articles previously published. The remainder include data on the village population and their farms, an inventory of stock in a village grocery store, a note on taxes, and a note on methodology.

Economic Systems; Planning and Reform; Cooperation

Saving American Capitalism. Edited by SEYMOUR E. HARRIS. (New York: Alfred A. Knopf. 1948. Pp. xviii, 373. $4.00 net; $3.00 text.)

Reviewers of Seymour Harris' collections of essays always complain of being caught on the horns of an ugly dilemma: shall they dutifully make a brief and superficial comment about each essay, or generalize broadly about the whole volume, risking serious injustice to individual authors. In the present case there are thirty-eight separate essays averaging a little under ten pages apiece. To choose the horn of itemization would give me, in my 1800 words, approximately forty-seven words per essay, or about two sentences including mention of author and title. Accordingly, I shall seize the other horn pleading guilty in advance to charges of libel against individual contributors. The risk of misrepresenting a great many of the authors is reduced by the fact that fifteen of them are Mr. Harris himself, who sets the pace and tone for the remaining twenty-three.

He does this so successfully, partly by skillful editing and partly by writing nearly a third of the book himself, that the volume as a whole conveys a fairly clearly definable message. It is perhaps an inevitable consequence of the brevity of the individual pieces that the message is neither very novel nor very profound. It is the function of the book not to innovate but rather to summarize for the benefit of a popular audience a rather familiar approach to today's major problems of economic policy—that of the new New Deal. Essays by Chester Bowles, Adolf Berle, Charles Merriam, Leon Keyserling, O. H. Taylor, and Seymour Harris describe the basic philosophy of the "mixed" economy. True democracy is only attainable, so runs the theme, if government takes vigorous action to maintain employment, to insure an equitable distribution of income, to promote an active program of resource development, to provide ample social services, to enforce a "balance" in the wage-price-profit structure, and generally to plan. In so far as private enterprise and free markets are consistent with these essential governmental functions, they can and should be fostered and encouraged. But we must not let the shibboleth of minimum government blind us to more fundamental goals.

There is great virtue in reiterating, as do the essays of Richard Gilbert and Merle Fainsod, that private enterprise and government control are means and not ends and that the proper balance between them must be determined not on rigid *a priori* grounds but by the pragmatic test of effectiveness. It is highly plausible to argue that as long as private enterprise can be made to operate in the public interest it should be allowed to function, but that where it fails to do this, government must step in. But this really does not get us as far as it seems to. The argument merely travels one floor down to what constitutes the public interest.

On this plane the analysis of Mr. Harris and his co-authors is not as fundamental or penetrating as it might be. The desirability of full employment, resource development, equitable income distribution and the like is too obvious by now to need the reiteration it gets in this book. But all

economic and social systems promise these things. Why, then, should we want to save capitalism as these authors all say they do? There is very little consideration here of what it is about capitalism that makes it worth while trying to save in view of the fact that it would be technically much easier to solve some of our problems such as unemployment if we were to abandon "free enterprise."

The emphasis is perhaps explained by a comment of Mr. Bowles who says, "The most dangerous long range threat to our democratic institutions in America comes not from the inept Communists to the Left but from the reactionaries at the extreme Right" (p. 19). If we start from this premise, the first step in the argument must logically be the one taken in these essays of insisting that we can have full employment, stability, health, good houses for all, etc., without setting off down the Road to Serfdom.

There are undoubtedly a great many people who need to be persuaded of this. Even for this audience the plea would be more effective if it dealt more directly with some of the difficult problems we must solve if we are to pursue the New Deal Utopia within the framework of a genuinely democratic, not to say capitalist, society. Those of us who have long accepted the goals these authors describe would like to see more attention paid to how we might resolve some of the inherent conflicts among these goals.

For instance, the chapters on resource development by Morris Cooke, Carlton Nau, Morris Garnsey and Seymour Harris, those on housing and urban redevelopment by Charles Abrams and Guy Greer, and that on federal research by James Newman are eloquent statements of promising ways in which we can use our resources. But, for a book by economists, there is singularly little recognition here of the problem of choice in a society. How can the people of a community be made aware of the cost in opportunities foregone of all the wonderful things the authors would like to use resources for? How can their views be sought as to when more electric power and more apartment houses are no longer worth the automobiles and movie palaces they must give up to get them? What mechanism can we invent to insure that such decisions are really made by the people and not by bureaucrats and "experts"? There is no mention of this problem in the book.

It is certainly true, as many of these authors insist, that the private price system is not the effective machinery for making some of these decisions that the nineteenth-century economists hoped it was. Should we not, then, be giving a little more thought to the substitute? It is not enough to say that "the best available medical care should not be denied to any citizen" (Bowles, p. 27), or that "if health is worth having it is worth having now" (Berle, p. 55), or that "water and power resources should be developed to the full" (Nau, p. 122), or that we should exploit "every potential kilowatt of hydro-electric energy" in the West (Garnsey, p. 133), or that "large funds" should be made available for "redevelopment of in-town blighted areas" (Greer, p. 200). These needs should be called compellingly to public attention, as these essays do. But the Welfare State must, if it is to be democratic, find better solutions than quadrennial elections for the problem of how to make governmentally allocated resources satisfy the values of majority

and minority consumers and not merely those of contributors to a symposium.

It is probably true, as these authors frequently suggest, that high pressure salesmanship induces us today to spend too much on tobacco and too little on medical care, but there is a point beyond which we do not want to give up cigarettes for an extra pint of milk or a shade whiter teeth, and the Welfare State will neglect the search for that point at its peril.

The eat-your-cake-and-have-it-too implication of some of these essays is an understandable consequence of their preoccupation with both cyclical and secular deficiencies of effective demand. The opportunity cost of *any* use of resources appears to be zero or negative if the alternative is unemployment. "The combination of unemployed money and unemployed men to reclaim many regions like the Tennessee Valley is, we hope, assured" (Harris, p. 8). But of course the alternative need not be unemployment, but may be more houses, more clothes, or more pulp magazines. There is little suggestion in this book that this problem exists. It is no defense to point out that public investment can be highly productive and thus need not require any sacrifice in the long run. The same thing is true of private investment. There remains with both a real problem of how much consumption we will forego meanwhile.

One section of the book is devoted to essays by Alvin Hansen, Lorie Tarshis, George Soule, Lester Chandler, and Seymour Harris on why and how demand and employment must be stabilized. This, as might be expected from these authors, constitutes a very well stated primer of the theory of income and employment and its applications to fiscal and monetary policy, inflation, and the farm problem. Here again, my principal complaint is that it all sounds too simple. If Lincoln Steffens was right in insisting that the main function of education is to teach not what is known but what is still unknown, this would not be a fruitful text. In spite of Gilbert's generous admission that "we do not know everything yet," the book leaves the reader unaware, for instance, of the confusion in our theories of general wage and price movements or the inadequacy of current analysis of the relation between monetary policy and liquidity. There is no hint of our abysmal lack of empirical knowledge as to just what factors have an important effect on investment spending or our uncertainty as to how consumption is related to income.

Indeed, on this last point, many of these authors have no uncertainty at all. They take it as so firmly established a truth that redistribution in favor of low incomes (frequently identified with aggregate wages) will expand total spending that they do not have to explain, much less defend, this proposition. Bowles speaks as though everybody knew that maldistribution was responsible for the 1929 crash. Berle says of the fact-pursuing liberal that "He has a pretty clear idea that these evil times are somehow connected with the phenomenon of badly distributed national income; and he has learned that, in proportion as the standard of living of the lower income groups is raised, the violence of 'boom' and 'bust' is relieved." Harris relies on re-

distribution as a major element in stabilization policy, and Schlesinger and Gilbert both imply that making taxes steeply progressive will greatly increase consumption. Keyserling's concept of balance in the wage-price structure seems to refer principally to the notion that such balance is necessary to prevent oversaving.

The reputation of the "science" of economics is surely not enhanced by setting down propositions as untested as these as though they were among the axioms of our so-called discipline. In the first place, at least a reputable segment of the profession does not accept them; in the second place, there is some admittedly sketchy evidence that they are not quantitatively very important even if they are qualitatively correct; and thirdly, and most important, no really good or reliable evidence that could be said either to prove or disprove them has yet been published, so far as I know.

Many statistical studies of the consumption function appear to indicate that the marginal propensity to consume of individuals is fairly constant over a wide range of income. If this is so, redistribution between persons should not greatly affect total consumption expenditure. Shifts from corporate to private income are perhaps more likely to stimulate consumption, but in view of the importance of retained earnings as a source of funds for investment, such shifts may well depress investment by as much as they stimulate consumption. I am not saying that these possibilities are any more demonstrable than those the authors assert, but merely that our evidence as to the determinants of consumption expenditure is slight, unreliable, and conflicting. To take unverified hypotheses, stated as proven fact, as the basis for policy proposals is to be guilty of the kind of irresponsibility with which social scientists are always being charged. This is not an argument against income redistribution, which I incidentally happen to favor, but a plea that it be defended on somewhat more honest and scientifically reputable grounds.

The horn of the Harris Reviewer's Dilemma which I have seized has prevented me from saying much about the pieces in the volume which are less representative of its general flavor. These include a brief plea for more antitrust enforcement by Berge, an excellent little piece on foreign economic relations by Lerner, balanced appraisals of the Taft-Hartley Act and the social security problem by Dunlop and Witte, respectively, and a very polished discussion of literature and liberalism by Howard Mumford Jones which makes the reviewer aware, by contrast, of how badly economists write. I do not feel as unhappy about my neglect of these essays as I might if they were longer and if their authors had therefore had an opportunity to develop a more meaty thesis. It is to be hoped that in the future Mr. Harris will check his tendency to collect larger and larger numbers of shorter and shorter essays into more and more frequent volumes, and that we shall be spared the logical climax of the present trend—a volume of aphorisms entitled "The Wisdom of Many, Many People."

MAX MILLIKAN

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Business Fluctuations; Prices

Teoria e Politica della Piena Occupazione. By VITTORIO MARRAMA. (Rome: Universita di Roma—Facolta di Giurisprudenza, Instituto di Economia e Finanza. 1948. Pp. 302. L. 1200.)

Vittorio Marrama is known to American economists through his papers in *Economica* and *The Review of Economic Studies*. In the present book he confirms the impression of ability that readers of these articles will have formed, and reveals as well an extraordinary acquaintance with the literature of his subject. The object of the work is to present a critical reconstruction of full-employment theory and policy in the light of the principal developments in the Anglo-American, and in particular the British literature since 1935. Although the study is intended chiefly as a contribution to Italian thought, there is much in the book that will be of interest to American readers.

The work is divided into three parts. Part I, entitled "Equilibrium, Price Flexibility, and Full Employment," first deals with the conditions of full-employment equilibrium under static assumptions, with particular reference to the treatments of Pigou, Hicks, and Lange. The Wicksellian analysis is then introduced, and this is followed by a discussion of the instability of full-employment equilibrium under conditions of uncertainty. Hicks and Lange are again the major objects of attention, though the contributions of Marschak, Shackle, and Hart also come in for consideration.

Part II, called "Effective Demand and Full Employment," is composed of four chapters dealing successively with fundamentals of the Keynesian theory, economic maturity, the Ricardo Effect, and dynamic models of the Kalecki-Kaldor type.

Part III consists of three chapters on full-employment policy. The first of these is concerned with the problem of stabilization of effective demand, and surveys the efforts at national balance sheet construction that have been made in Britain and America. The other two chapters consider in detail the questions of means, consequences, and limits of a policy of full employment.

Four appendices to the study add considerably to its value. These are entitled respectively: "Inadequacies of the Traditional Theory of General Equilibrium," "Recent Developments of the Theory of Interest," "'Democratic' Planning in Great Britain," and "Reflections on the Problem of Employment in Italy."

The principal conclusions of the study proper are as follows (pp. 241-43):

1. The doctrine of full employment has ample justification from the theoretical point of view, but the economic policies implied by the doctrine involve many and serious difficulties.

2. Outside the English-speaking countries, the Anglo-Saxon doctrine of full employment is applicable only where similar economic structures exist. Otherwise, substantial qualifications must be admitted. In Italy, for example (Appendix IV), unemployment is due mainly to a fundamental shortage of capital, and what is wanted is increased productivity rather than a higher propensity to consume.

3. Whatever the structure of an economy may be, successful full-employ-

ment policy requires the fulfillment of certain general conditions. The State must be regarded as responsible for the maintenance of at least high-level employment; it must be possible to coordinate general economic activities consistently with this object; public finance must be susceptible of subordination to the larger end; and theoretical and statistical research must go forward, particularly with reference to national income and aggregate saving.

To anyone who reads Italian without great difficulty this book may be recommended. The non-specialist will find it an excellent survey of recent work on the subject. Virtually nothing that falls within the scope of the study has been overlooked, and the author displays a thorough mastery of his great mass of materials. For the specialist, there is food for thought in the numerous discerning judgments of the author that cannot be discussed in a brief review.

RICHARD V. CLEMENCE

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Les Crises de Reconversion et la Politique Economique d'Après-Guerre. By ALAIN BARRÈRE. (Paris: Librairie Marcel Rivière. 1947. Pp. 199. 230 fr.)

Professor Barrère, of the University of Toulouse, has divided his timely work into two main parts; the first deals with the theory of reconversion crises, and the second with policies relating thereto.

Although the author emphasizes the crisis stage, he is also briefly concerned with the other stages of a complete cycle from depression to recovery, boom, and crisis.

The first thesis of the book is that business cycle theory is inadequate to explain the economic disturbances which historically follow major wars. There is required, therefore, a special theory which, although not unrelated to business cycle theory, is endowed with peculiar characteristics which amply justify its separate existence.

Barrère's account of the cycle which follows modern wars can be briefly summarized. First there is a brief depression which is the result purely of technical difficulties encountered in demobilizing the war economy and reconverting it to peacetime uses. This period is both short-lived and mild, with rising prices and increasing retail sales and obviously little similarity to the depression phase of the normal business cycle.

There follows a period of rapid expansion, which begins as soon as industry is reconverted and able to produce consumer goods. The primary characteristics of this phase are the sudden release of pent-up demand for consumer goods (especially the durable variety) and rising prices. These events are the natural consequences of the war period, during which income was increased, consumption restrained, and money and credit supply greatly expanded. Production of consumer goods is unable at first to meet the accumulated demand, so that a rapid rise of prices ensues.

The author lays great stress on the point that the reconversion boom is led by the consumer-goods field, in contrast to the business cycle boom which is sparked by an increase in the demand for capital goods.

The crisis stage is brought on by the satiation of demand for durable consumer goods. An important role in this connection is attributed to the rising prices which, on the one hand dissipate liquid savings and lead to consumer resistance and, on the other hand, encourage speculation. Speculative demand, with the aid of easy credit, sustains the high-level production until it becomes apparent that consumer demand is declining, at which point speculative demand also falls off and depression ensues.

Both the expansion and contraction phases of the reconversion cycle are marked by their brevity and their intensity. With appropriate policies the integration of the reconversion cycle into the business cycle can be accomplished without great difficulty.

Examining the reconversion policies followed by the United States, England and France after both world wars, Barrère concludes that, in the case of the United States at least, the basic difficulty was the conflict between the desire quickly to remove wartime controls and return to noninterventionism and the desire to prevent a reconversion crisis. As a consequence of compromise between these objectives, only half-measures were taken, a severe depression occurred in 1920-1921 and, referring to the United States in 1946, a "depression appears inevitable sooner or later."

In general, Barrère appears to recommend the maintenance of necessary economic and monetary controls to prevent speculative price increases, and the adoption of anti-cyclic government investment programs.

Professor Barrère's book is of interest, not for the introduction of any important new ideas, either in the field of theory or practice, but because of its timeliness in reviewing the weaknesses of reconversion policies. Although he concluded in August, 1946 that a (reconversion) depression in the U.S. was sooner or later inevitable, in an appendix dated May, 1947, it is stated that the United States has succeeded in controlling "rather happily" the development of the boom. If Professor Barrère could add another appendix on this subject now, one wonders what his comments would be.

D. A. SNIDER

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Money and Banking; Short-Term Credit; Consumer Finance

Monetary Theory and Fiscal Policy. By ALVIN H. HANSEN. (New York: McGraw-Hill. 1949. Pp. ix, 236. Price $3.00.)

The purpose of this book, which is "devoted mainly to the subject of money," is to supplement the standard texts on money and banking. It is one of the Economics Handbook Series, and, as the editor says, will be useful to teachers of courses in money and cycles. Of the fifteen chapters, the first six deal with the relation of money to income, and state the case for preferring the income theory to the quantity theory. (Rather too often the attack is directed against the discredited "crude" quantity theory.) The income approach is represented as involving analysis of cost and aggregate output as well as aggregate demand and income. This leads the author, in

four chapters, to consider the interrelationships btween costs, wages, employment and prices, including a chapter each devoted to Keynes' theory of money and prices and to factors making for price "stability" over the past 150 years. The rôle of money in relation to fiscal policy is next discussed (Chaps. 11 and 12), followed by a treatment of the limitations of a stabilizing budget through built-in flexibility, and a brief for a managed compensatory fiscal policy in Chapter 13. Public and private expansion alike must be accomplished by an increase in the money supply, and it is argued (Chap. 14) that the latter cannot occur without an increase in the public debt. A final chapter is devoted to international monetary cooperation. Owing to extremely wide coverage in a short space, undergraduates (and even graduate students) are not always provided the background needed to appreciate fully what is being debated. The volume is much more a highly stimulating and provocative monograph than a handbook.

Granted the lack of stability in the relation between money and income, which implies that the banking system cannot count on increasing incomes by augmenting the money supply, expanding income nevertheless requires an increase in M. The long-run problem is to maintain the "amazingly stable" rate of increase of the past (pp. 4, 140-42) to correspond at least with the probable rise in real incomes (p. 194), taking into account the possibility of a continuance of the decline in income velocity characteristic of the last 150 years (brought about largely by the desire of the public to increase the proportion of income held in the form of money as real income rose.) This cannot be accomplished passively. A substantial rise in the public debt appears to be necessary, because (1) under our monetary system a rise in the money supply requires a rise in bank assets, (2) the experience of 1920-1947 casts doubt on the likelihood that private investments of banks will increase rapidly enough, and (3) savings institutions will not yield their government securities to the commercial banks.

The weak link in this chain seems to be the selection of 1920-1947 as a basis for predicting the future. Between depression and wartime controls over the power of the banks to lend, not much scope has been accorded the banks to perform an operation which during a good part of the time was not needed, and during much of the remainder was largely taken out of their hands. In any event, those "who talk glibly about a continued reduction in the public debt" (p. 196) might, in reply to Professor Hansen, advocate the replacement of a sufficient amount of maturing debt with a "tailored issue," available to the banks alone. This should not be an impossible institutional change. If it is answered that this deprives the savings institutions of earning assets, it may be pointed out that the problem then becomes not the technical one of an adequate money supply, but rather how to stimulate investment.

The importance attributed to the money supply in supporting the growth of real income opens up the problem of the achievement of the "right" amount of money. A survey of the alternatives is presented in Chapter II, which is the main link between the present volume and a standard text in

money and banking. It is made clear that an increase in the volume of money may not by itself increase income. In fact, causality runs in the opposite direction. (But at one point it is affirmed that income and the rate of interest "are mutually determined" by the quantity of money, the schedules of marginal efficiency and liquidity preference, and the consumption function [p. 81].) The "crude" quantity theory held that of an increase in M, none would be held idle (p. 57). It overlooked the effect of reductions in the interest rate on this willingness of businessmen to get along with smaller balances. But though the quantity theory ignored the relation of the interest rate to the demand for money, we are warned to guard against a too rigid adherence to the liquidity preference theory. Productivity and thrift "have very much to do with the rate of interest," though indirectly (p. 81).

It is worthy of note that Professor Hansen rejects the importance of the activation of idle money (and conversion of near money to money) both at the beginning of an upswing and during a period of inflation in the money supply. At the bottom of a depression, it is argued, income and planned saving are so low that bank financing is necessary whether recovery is proceeding by way of either public or private investment. A rapid recovery must ordinarily be financed out of new money. There are no excess savings in depression (p. 187); and if financed out of idle money, new investment will cause the rate of interest to rise "more or less," which will prevent the full leverage effect of increased investment. It would indeed appear reasonable that if a large volume of deposits is destroyed during a depression, these deposits will have to be restored during the subsequent recovery. But the analysis seems to give too much emphasis to the rôle of the money supply, and this owing to the importance and behavior ascribed to the interest rate. One would suppose that the interest-elasticities of the liquidity preference function and of the investment and consumption functions would be such during periods of much unemployment that (1) borrowing from idle balances would not raise the interest rate much, and (2) the dampening effect on investment and consumption of the rise that did take place would be small. The same objection applies to the author's treatment of the rôle of the money supply when price controls were abolished in 1946 (see below).

The income theory is next discussed with reference to the views of Tooke, Wicksell, Aftalion, and Keynes. This approach regards changes in aggregate demand as the initiating force, giving effect to changes in quantity of money by way of output, wages and prices (p. 118). By starting with income, the possibility of incorrect analysis arising out of variations in the relation between the volume of money and income is eliminated. Finally, the income theory is more revealing, in that by giving up the mechanical quantity approach, attention is directed to the reasons for investment decisions, and therefore to the reactions of costs and supply to changes in the size of the income flow. This analysis is carried out in Chapters 7 and 8, with particular reference to the possibility of undercapacity, sharply rising marginal cost curves, and abnormal profits, which, if diverted to wages, only raise demand curves and profits still more. The conclusion is reached that capacity does

tend to adjust itself to peak outputs. But if booms are lacking to absorb the labor force, this result can be accomplished by a full employment policy "on a basis such that people expect it to persist" (p. 113). It may be asked how far the government would have to go in guaranteeing full employment in order to make businessmen willing to *expand* plant and equipment. One other point should be brought out with respect to Professor Hansen's treatment of inflation at full employment. Labor is not regarded as a bottleneck (other inflationary forces being absent) because of the flexibility provided (among other factors) by the 4 to 5 per cent turnover associated with full employment (p. 113-14). But can full employment reduce substantially the assumed average of 5 weeks that it takes a worker to find a new job? Even if this could be counted upon, we should have to change our definition of full employment as this source of labor flexibility was tapped.

The discussion of wages and prices in Chapter 8 gives the author an opportunity to assert his view as to the proper point to break the income-expenditure circle. The result does not seem entirely satisfactory. "If an inflationary price movement is allowed to develop" (p. 115), efficiency wages will rise, and a new plateau will be established, around which the rest of the price structure revolves. But in the case given prices, not wages, rise first. Is it argued that an increase in the quantity of money *cannot* contribute to rising prices, including wages? Apparently not, for (p. 117, note 1) "The removal of price controls in July, 1946, among other factors, led to wage advances that have placed us on a new level of *labor* cost (author's italics) - the foundation for a new high plateau of prices." But why did this occur? Obviously because of the release of spending pressure generated in an earlier period of increased quantity of money (including near money) that pushed up *all* prices including wage rates. The direction of causation is that posited by the quantity theory, not the reverse. And unless wages are the only sticky prices (how about supported farm prices?) why not speak of a higher plateau of general prices, including wage rates?

Limitations of space prevent the detailed comment throughout that this book deserves. Having summarized in Chapter 9 the argument of Chapter 21 (The Theory of Prices) of the *General Theory*, the author goes on in Chapter 10 to consider the factors that may have been responsible for what he calls the reasonable stability of wholesale prices during the period 1800 to 1914. (In the same paragraph he states that prices fluctuated "considerably, and at times rather violently" [p. 143].) This "stability" is explained largely by the circumstance that entrepreneurs are under pressure to reduce costs. Thus profits rise. If part of the rise in profits is passed along in the form of price reductions, in a dynamic society, a greater amount will be spent than before for new products, which will be a reason for the reductions actually to be made. But against this secular decline in the prices of new products must be set the price rises in declining industries. For part of the profits will be passed on in the form of wage increases. This forces the less progressive industries to raise prices. "The balance of these forces tends to produce a fairly stable general level of prices" (p. 145). But what hap-

pens to sales when the stagnant industries raise prices? Many of these industries must in any event be making products that are gradually being superseded. There would not appear to be much significance, for a general price index, in the prices of the products of declining industries, or industries which encounter diminishing sales due to the rise in prices.

Though principally concerned with the rôle of money in economic fluctuations, Professor Hansen has something to say of the part played by fiscal policy. The latter is regarded as a much more effective and less dangerous method of control than is monetary policy. The enormous rise in federal expenditures and taxes since 1940 leads the author to ask for a reconsideration of the possibilities of anticyclical public investment. But he points out that the built-in flexibility of the stabilizing budget proposed by the Committee for Economic Development does not go far enough; large declines in income can occur with fixed expenditures and fixed tax rates, even if the tax system is steeply progressive. Our economy does not fluctuate mildly about a high level of employment. Economic activity proceeds by spurts of autonomous investment that are self-limiting, and compensatory action is necessary. To this end it is recommended that, within limits specified by Congress, the executive branch be given authority to offset fluctuations in income by adjusting income tax rates. Since this book undertakes to recommend actual policy, the question may be pertinently asked whether an executive responsible to the electorate can afford to assume this power in the absence of better means of recognizing changes in the direction of output and employment than are available at the present time.

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Public Finance

Finansprocessen i det økonomiske kredsløb (The Fiscal Process in the Circular Flow). By JØRGEN GELTING. (Copenhagen: Forlaget for Videnskabelig Litteratur. 1948. Pp. 304.)

In the Scandinavian economic literature much attention has in recent years been devoted to problems of fiscal policy. Best known in the Anglo-Saxon world are perhaps the works of Myrdal, Lindahl and Jørgen Pedersen. To this series of studies has now been added an interesting doctoral dissertation by Jørgen Gelting of the University of Copenhagen. Briefly the book can be characterized as an attempt, along Keynesian lines, to analyze the interplay between the public and the private sectors of the economy. Although the main emphasis is on the "circulation" effects, part of the study is devoted to an analysis of the "discriminatory" effects of individual taxes.

In the main theoretical chapter that has given the title to the book, Gelting undertakes a very penetrating and systematic analysis of the relationships between the fiscal process and the level and components of the national income. His key concepts are public "expenses" and "revenues" that are defined respectively as any public payments and receipts that the private sector considers as additions to or subtractions from their incomes. These

definitions present certain difficulties. In individual cases it is often difficult to draw a clear distinction between, say, those public expenditures that generate and those that do not generate incomes. It seems to be partly a question of the length of the period under investigation; in the long run most public expenditures might reasonably be expected to have some income-generating effect. A great many multiplier formulas are presented in the chapter; if all the variations of the basic models are included, we get close to one hundred multipliers, probably an all-time record in the literature. Most of the models are static, but he does include a few dynamic systems that are inspired by Kalecki. While many of the results are familiar to students in this field, other findings are not. Thus, his analysis of the balanced budget is in my opinion superior to the discussion that took place a few years ago in *Econometrica*. Gelting's own ideas in this field were, by the way, first developed in an article published in *Nationaløkonomisk Tidsskrift* in 1941.

To characterize his methods further, it should be pointed out that he relates the various propensities (or leakages) to money income rather than real income. This procedure is perhaps justified for direct and indirect taxes as well as for imports; it is a question though whether the propensity to save is not more closely correlated with real income. The material presented in the book is not conclusive on this point, and American investigations do not seem to confirm his assumptions. One final remark must be made about this part of the analysis: while most of his multipliers are basic or pure, there are a few instances of what Samuelson recently has called "pseudo-multipliers," *i.e.*, income variations have been related not to changes in parameters but to resulting changes in other variables of the system.

The following chapters discuss the interaction between fiscal and monetary policy and also the special problems raised by relations with other countries. This last aspect is of course of obvious importance for a country like Denmark. There is a penetrating analysis of how to accomplish a given change in national income through different combinations of exchange rates, fiscal policy and interest rates, assuming the maintenance of a balance-of-payments equilibrium.

In my opinion, the book represents one of the most systematic and useful surveys in the field of fiscal policy. It is unfortunate that the language barrier will severely restrict the number of readers, and it is to be hoped that the author will publish some of his more important findings in English or American journals.

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International Economics

ECONOMIC PUBLICATIONS OF THE UNITED NATIONS

The Secretariat of the United Nations has published several economic studies since it was organized in 1946, in addition to the considerably larger number of informal reports it has made and extensive assistance it has

rendered to various United Nations bodies, particularly the Economic and Social Council and its various commissions.

The present writing is designed to provide an indication of the nature of the principal economic publications of the Secretariat itself. Some of these publications represent continuations or completions of works undertaken by the League of Nations Secretariat, but most have been initiated by the United Nations. Reference is made to the periodic UN publication, *Directory of Economic and Statistical Projects,* a useful guide to UN economic studies completed and planned.[1]

The first comprehensive economic report published by the United Nations Secretariat was *Salient Features of the World Economic Situation, 1945-47* (January, 1948). This report provided the basis for the Economic and Social Council's first annual discussion of the world economic situation, in February, 1948. The principal statements of the Council members were published in a *Supplement to the Economic Report* in March, 1948. Henceforth, it is anticipated that the major annual economic report will appear in the late spring, and be used by the Council principally in its summer session. One interim report on economic conditions, *Selected World Economic Indices,* was published in July, 1948, primarily for the seventh semi-annual session of the Economic and Social Council, and a second, *Major Economic Changes in 1948,* was published in January, 1949, just prior to the eighth session of the Council.

These general reports suffer from a deficiency of data for many parts of the world, from the haste with which they have had to be prepared, and from some uncertainty as to just what they should contain in the way of description, analysis or prescription. The availability of statistical and other information on the United States has caused the reports to give undue emphasis, at least superficially, to the United States as an element in the world economy. The table of contents of the first report, *Salient Features of the World Economic Situation, 1945-47,* gives a good indication of the nature of these reports: "The World's Supply of Commodities," "International Trade and Credits," "Production Bottle-necks," "Inflationary Pressures," "Regional Economic Conditions," "The World Food Situation," "The European Coal Situation," "The World Transport Situation," "World Manpower Problems," "Progress of Economic Development,"[2] and "International Action in the Economic Field."

Regional economic reports have been made or are in process by the parts of the UN Secretariat attached to the three existing regional economic commissions. Two notable reports have been produced by the Secretariat of the Economic Commission for Europe and first surveys are in preparation for the Economic Commission for Asia and the Far East and for the Economic Commission for Latin America. *A Survey of the Economic Situation and*

[1] The writer wishes to note the cooperation of the UN Department of Economic Affairs in the preparation of this review.

[2] This chapter was drawn largely from a Secretariat publication entitled *Economic Development in Selected Countries: Plans, Programmes and Agencies* (October, 1947).

Prospects of Europe, published in March, 1948, and *Economic Survey of Europe in 1948,* published in May, 1949, are by far the most distinguished UN economic publications thus far. They have been prepared under the general direction of Gunnar Myrdal, executive secretary of the ECE, by the staff of the Research and Planning Division, headed by Nicholas Kaldor and Hal B. Lary.

The March, 1948 report covered European production, trade, and balances of payments on a factual basis, and analyzed the major problems of inflation, intra-European trade, and production bottlenecks. Both this report and its May, 1949 counterpart were reproduced as Congressional committee documents because of their bearing on the European Recovery Program. The second report is even broader in scope, with chapters on "The Progress in Production," "The Progress Towards Internal Equilibrium," "The Rate of Capital Formation," "The General Pattern of Trade," "Prices in International Trade," "Balance of Payments and Trade with Overseas Countries," "Intra-European Trade and Payments," "The Progress in Planning," "Problems and Prospects." A magnificent array of tables is provided in this report. Special mention might be made of the two-way table on "The Network of Europe's Trade by Individual Countries."

Both of these ECE reports are extremely well written, contain extensive, well-organized material on the European economy, and reflect the high technical competence of the staff. They are indispensable reading for persons concerned with European economic problems. To admire the general excellence of these reports is not necessarily to agree with the policy conclusions, implied or expressed. For example, through both reports runs the theme that the responsibility for attaining balance-of-payments equilibrium by the various European countries rests largely with the United States. The gist of the argument is that if the United States is not going to take special pains to import European goods (or organize a triangular system to the same effect), and if the United States is not going to make capital (or grants) available on terms acceptable to the European countries, then any failure of the European countries to restore general currency convertibility and multilateral, nondiscriminatory trade will be the fault of the United States. "The only feasible alternative would be for the United States to plan ahead its long-term lending to the rest of the world in a manner that would generate a predictable and reasonably steady flow of dollars to the outside world and thus permit the restoration of international currency convertibility" (May, 1949 report, Chap. 9, p. 21a, preliminary edition). There may or may not be a good basis for an outflow of capital to Europe from the United States after the Marshall Plan period, but to use the possible lack of such an outflow, or its uncertainty, or its irregularity, as reason for maintaining strict currency and trade controls is tantamount to saying that these controls should be maintained and/or American aid continued for one reason if not for another. The reports contain many variations on this theme.

One other criticism might be mentioned. A surprisingly crude analysis is made in Chapter 9 of the May, 1949 report of the commodity composition

of Europe's trade in relation to that of the United States. A reality is attributed to the categories of commodities, "manufactured goods," "food," "raw materials," which leads the authors to the curious view that there cannot be two-way trade between two countries of commodities which happen to fall within one of these arbitrary categories. Carried to the extreme, this view would be that a country only buys commodities from abroad which it cannot make at all at home. It is rather shocking to find this pre-Ricardian view implicit in an otherwise highly sophisticated piece of economic writing. However, this is a minor blemish, when set against the excellent analysis of the Western European payments scheme and the terms of trade, to cite two examples on the plus side.

The remainder of this review is devoted to brief descriptions of other UN Secretariat publications of general interest to economists.

Survey of Current Inflationary and Deflationary Tendencies (Prepared by the Division of Economic Stability and Development of the United Nations Department of Economic Affairs [Lake Success, N.Y., Sept., 1947], 86 pages). This survey analyses for selected countries the problems of deficiency or excess in effective demand which may lead to unemployment or inflation. The survey considers that the factors which contributed to the high level of demand in the United States in the postwar period were (1) the high rate of consumption of durable goods, of business investment in plant and equipment and of residential construction, resulting on the one hand from pent-up demand and, on the other, from the improving supply position; (2) large net exports, resulting from urgent needs of foreign countries and financed in large part by loans granted by the United States government; and (3) the rise in inventories—which had been low in relation to shipments—to levels approximating the prewar relationships. The survey notes that some of these factors may decline in significance and the situation may be altered materially by important changes in governmental policy with respect to foreign loans and domestic taxation. In devastated Europe, the rate of public and private investment to meet reconstruction needs was higher in relation to national income than before the war. Postwar taxation and imports of capital from abroad left the portion of investment to be financed by saving at home at a higher level in relation to national income. However, a number of reasons contributed to the tendency to save less than before the war, including the lack of confidence in the value of money; the low volume of *per capita* consumption, especially of necessities; and the large pent-up demand in terms of liquid savings accumulated during the war. The scarcity of food and of coal, which hampered the production of consumer goods, was the main factor in determining the supply position. Some countries, such as the United Kingdom and Yugoslavia, attempted to combat inflation by a comprehensive system of controls and rationing; others, such as France, Italy, and Poland adopted partial controls only. During the war and postwar period, the underdeveloped countries of Latin America and Asia experienced a great increase in demand which led to inflationary pressure, because the supply, especially of agricultural goods, was relatively

inelastic. In India, the initial rise in demand during the war was due largely to an increase in government expenditure which was not financed by taxation; in Latin America, it resulted primarily from a large increase in exports which was not balanced by an increase in imports. Inflationary pressures continued in both these regions as a result of pent-up demand for investment and consumption goods, the large government deficit in many countries and, in Latin America, the high level of exports after the war.

Post-War Shortages of Food and Coal. (Prepared by the Division of Economic Stability and Development of the United Nations Department of Economic Affairs [Lake Success, N.Y., July, 1948], 37 pages.) This report is a statistical and economic analysis of postwar shortages of food and coal and their effects on the world economic situation. These basic shortages considerably impeded reconstruction and directly or indirectly were the main elements in the scarce supply of consumer goods and thus were responsible, to a great extent, for the strong inflationary tendencies prevailing in many countries. This study calculates the shortages in a specific sense: the food shortage is measured in relation to prewar standards of *per capita* consumption in terms of calories; the shortage of coal is measured in terms of the decline in consumption in relation to requirements for industrial production, transportation and domestic use on the basis of prewar standards. Practically all of Europe and Asia suffered a decline in *per capita* production and consumption of food in terms of calories and a deterioration in the quality of the diet. In 1946-47, the consumption deficiency, measured in calories *per capita,* amounted to about 18 per cent of the prewar level for the deficiency area (excluding China and the Union of Soviet Socialist Republics). World production and consumption of coal in 1947 was at about the 1937 level, but in Europe and Asia production was considerably below prewar levels, while United States production was about one-third higher than the prewar output. European coal output for 1947 (excluding the USSR) was 18 per cent below the 1937 level. Although exports of coal from Europe declined and imports to Europe increased, coal consumption fell by 12 per cent.

Measurement of National Income and the Construction of Social Accounts.[3] (Report of the Sub-Committee on National Income Statistics of the League of Nations Committee of Statistical Experts [United Nations, Geneva, 1947], 116 pages.) This report contains Committee recommendations on methodology with respect to the measurement of national income and on table forms by which estimates for component items can be developed on a comparable basis for all countries. It includes a detailed appendix on the definition and measurement of the national income and related aggregates, such as national product, expenditure, capital formation, saving, balance of payments.

Note on Balance of Payments Statistics. (Report drawn up by the Subcommittee on Balance of Payment Statistics of the League of Nations Com-

[3] Publication of this report and the next two listed was undertaken by the United Nations after approval of the Economic and Social Council, upon the recommendation of the UN Statistical Commission.

mittee of Statistical Experts [United Nations, Geneva, 1947], 26 pages.) The League of Nations drew up a classification of items entering into international balances of payments in the early 1920's. This classification, which was applied in the annual balance-of-payments volumes issued by the League up to the war, was found lacking in certain respects during the 1930's, and the question of preparing a new classification was referred to the League's Committee of Statistical Experts. The present publication summarized the findings of the experts, who continued their work during the war. Their proposal may be regarded as a forerunner of the *Balance of Payments Manual* issued in January, 1948 by the International Monetary Fund, which now is in charge of the international work in this field. The principal changes in the Fund's Manual can, in fact, be traced to the *Note on Balance of Payments Statistics* prepared under the direction of the League's experts.

Balances of Payments 1939-1945. (Prepared by the Secretariat of the League of Nations [United Nations, Geneva, 1948], 207 pages.) This study, largely completed by mid-1946, concludes the League's series of balance-of-payments reviews. It contains balance-of-payment estimates during the war years for each of 24 countries and, for certain countries, summary tables of their international accounts, from the early 1920's to 1945, inclusive. Authoritative information concerning outstanding international liabilities and assets of the countries is given when available. Explanatory information on the computation of the statistics is also presented.

Public Debt 1914-1946. (Prepared by the Fiscal Division of the United Nations Department of Economic Affairs from information provided by finance ministries [Lake Success, N.Y., 1948], 170 pages.) This study presents data, in tabular form, on the public debt of 52 countries from 1914 to 1946—and to 1947 for some 20 countries. It discusses in a general note major differences in the concept and definition of public debt. Two tables are included for each country, with a few exceptions. The first tables give summaries of the total and of the foreign and domestic debt (subdivided into long-term and short-term) since 1914. Information regarding debt service, showing interest and amortization payments separately on the domestic and foreign public debt, is also given. The tables contain data on price movements and exchange rates for reference purposes. The second series of tables presents the development of public debt since 1928, indicating the position of the most important loans or types of obligation outstanding and, whenever possible, their purpose, nominal rate of interest, date of issue and maturity.

Review of International Commodity Problems, 1948. (Prepared by the United Nations Interim Co-ordinating Committee for International Commodity Arrangements [Lake Success, N.Y., November, 1948], 42 pages.) This review examines current international commodity problems and the principles evolved from experience in dealing with them. It reports inter-governmental discussions in 1948 regarding a number of commodities, but calls attention to the fact that no formal agreement relating to any of them has yet come into force. The report reviews the work of international organi-

zations concerned with particular commodities. The Committee notes the increasing tendency to consider economic problems on a regional basis, but points out the global nature of most primary commodity problems. This review reports rapid recovery in the production of many commodities and, for some, the disappearance of world shortages. The general trend in 1948 has been a downward movement in the prices of agricultural products and an upward movement in the prices of industrial raw materials other than those of agricultural origin. Charts on the production and prices of such primary commodities as coffee, cotton, rice, rubber, sugar, tea, timber, tin, wheat and wool are presented.

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Politics Among Nations. By HANS J. MORGENTHAU. (New York: Alfred A. Knopf. 1948. Pp. xv, 489, xix. Trade, $5.50; text, $4.25.)

The familiar problem of impending doom has given stimulus to many a writer in the years since the war. The atom bomb and the "superpowers" have loomed like mushroom clouds in the book reviews and in the publisher's advertisements.

A book which covers much of the ground of international relations in this present world, which adds meat to the discussion, and which brings logic and candor and thoroughness to many particular issues is surely to be welcomed. Hans Morgenthau has written such a book. In many respects it seems designed as a textbook, for it covers systematically a range of subjects that is quite commonly the content of a course. In some respects it reads more like an essay or a thesis, for it is organized and arranged with a sequence that transpires as consecutive argument. In some ways it reads like a series of lectures, for it is often fresh in the good sense, animated with the intrinsic interest of analysis and with a choice of facts that clinch, and of quotations that say something.

The argument is perfectly clear. The problem is to find the means for preserving peace among nations. The means that have been put forward, from the time of Grotius to the United Nations Charter are examined, and are found ineffective or fallacious. The remaining hope is diplomacy; and the book ends in a homily, in the classic style, on how to conduct diplomacy in such fashion as to preserve the peace. Unfortunately, there is, even in the book itself, all the material one needs to justify the rejection of diplomacy along with all the other rejected instruments.

What then? Peace must be made and kept, and peace among nations according to the classic concepts appears impossible. This is actually stated with considerable directness at page 262 and again at page 402 of the book. But scattered through the book, and treated *pianissimo*, there is the mention of many factors not known to the classic system. So far as these are not assimilated to the book, the book is incoherent. But in this very incoherence lies the possibility of alternatives. The book sticks in its argument to one category of factors, and stands as a *reductio ad absurdum*, a proof that no

solution lies within its ostensible method. Such a *reductio ad absurdum* is a noteworthy step, for it must always precede the discovery of a new approach.

The concept of power is given a prime place in the argument. This has a healthy effect, for it affords a consistent emphasis on a factor that is seldom treated as a uniform one in all times and conditions. It serves to fend off or to put in their proper places such other factors as ideology and law. The intrusion of power as a constant consideration in the argument serves like a mowing machine in what has too often been a weed patch of fallacies.

So, to this reviewer, the book is good and useful. There remain various features which make it less good and useful than it might be. Speaking perhaps only for one reader the book has many faults, and these will be discussed. Be it said first, that the faults are not intrinsic to the structure of the book. They give it, rather, the color of a draft that may yet be improved upon. They are not mortal sins, but they are sins of omission, or of under-emphasis, or of inconsistency, or of errors of fact. The book is good enough to deserve another edition someday, and its faults are therefore the more worthy of noting.

Several major factors receive what seems too narrow treatment, or outright neglect. These include sovereignty, economics, and ideologies. Sovereignty is taken by Morgenthau as necessarily indivisible. But it is so in the conclusion only because it was already so in the definition. The option remains, to redefine it, or to substitute another concept of authority. This option remains unexplored. Economics is discussed as an element in power. But it is not discussed as an element in general politics. An aspect of the state system that has always had less attention than it deserves, and which is hardly mentioned in this book, is the fact that every nation state has been a commonwealth, a political-economy, a free-trade area. In this way the state has been the condition in which the economy has grown, and the barrier that has stopped that growth. This relation of the state to economics, with changing technology and a rigid state, has produced the strains that lie behind the story of international relations. It throws light on what is happening to the nation state system and to politics among nations that could conribute much. Ideologies are treated in the book only as rationalizations and false fronts for national interest. The great ideologies are much more than that. The book itself notes that they are akin to the religious doctrines of an older age. It fails to note that such non-territorial loyalties are characteristic, throughout history, of those ages in which one territorial state system is passing and another is being born.

Among the points on which the book is inconsistent is the prospect of a world state. At page 402, the author rejects the idea that a world state can be established. And, at page 406, he flatly states that a world community must precede a world state, just as an American community preceded an American state. Yet, at page 301, he has previously stated that it is now possible for one power to conquer the world, and once conquered, to consolidate and maintain its power. Now one or the other is true or both in part only. As for the order in which a community and a state are established over any given area, it may be verbally true that an American community

preceded an American state. But the American community was an offshoot of the English, or British, community. And if one plunges back in history to Cromwell and the Tudors, and the Angevins, and the Saxon kings, it is apparent that an English state was built first and an English community or nation later and that a British state was built first, and a British community or nation later.

Of diplomacy, there are also scattered statements in the book that tend to undermine the conclusion. At page 50 he observes that diplomacy is the antithesis of democracy. If so, and if diplomacy is still to be held the only means to peace, the question is begged: What of democracy? The point is also made that diplomacy must be non-doctrinal, and elsewhere, that Communism is doctrinal. Is not diplomacy impossible then, short of a change in the character of the Soviet system? And what of the problem of administrative organization required for diplomacy today?

In discussing total war, the statement is made that one of the four ways in which war has become total is in respect of the "fraction of the population completely identified in its convictions and emotions with the conduct of the war." Yet, at page 103, there is a very lucid account of how large parts of French society were in opposition to the war at its beginning.

Aside from such contradictions between parts of the main argument and various side observations, there are some simple errors of fact and statement. These are superficial. The date of Foch's *Principles of War* should be 1903 rather than 1917. The quotation from Wotton on the rôle of an ambassador has been given in a word order that makes it clearer perhaps, but robs it of the play on words that gave it humor. The section on modern warfare beginning at page 292 is strewn with errors of fact or arithmetic, not serious in themselves, but also unnecessary to the point.

At only one point does the book mention the factor of professional or bureaucratic collaboration which may play an increasingly important rôle in world affairs. That is where it cites, at page 413, Mitrany's observations on the wartime Combined Boards. These are worthy of much more attention. The significant factor in such forms of international activity is the growing rôle of accepted knowledge that enters into them. It is observable that where definite knowledge, scientific knowledge, exists and covers a subject, a committee without internal command authority can arrive at a rigorous solution of a problem. In this sense the body of existing knowledge, and its degree of certainty, may be taken as one of the great determinants which shape the process and the outcome of any cooperative action among humans. We also know that the social sciences, whatever faults they may have, are very different from what they were a generation ago, and are changing rapidly. *Ipso facto* they are an important factor, a fundamental condition, affecting all processes of international collaboration today. The Office of European Economic Cooperation at Paris, and the Economic Commission for Europe at Geneva are both illustrations. Mannheim's observation that with the advance of knowledge politics would be displaced by administration was based on this relationship.

It is not intended here to suggest that professionalism can displace diplo-

macy as a Utopian remedy for the ills of the world. Nor is it intended that the abolition of sovereignty as an untouchable concept should be taken as a perfect salve. The refractory parts of the situation, and our refractory ideas, will need stronger solvents than any such details can provide. But the situation depends, in the opinion of many observers, on finding palliatives enough to extend the time until fundamental solutions can be found. If, for instance, one could cut out sovereignty as a fiction and recognize the rôle of professional knowledge, one at least reduces the burden of reliance that has to be carried in Morgenthau's argument by diplomacy alone.

All criticisms of this book lead back to the opinion that the book is good. Its faults are real faults, but they are the faults that accompany originality of conception and accomplishment. The task to which it is addressed is one that will occupy many hands for a long time. A new world system is in gestation. Its great describers, its Bodin or its Grotius or its Hobbes, have not yet appeared. *Politics Among Nations* is short of finality, but is a solid block from which to go on. That is more than can be said for many of the tracts now put forth.

GEORGE S. PETTEE

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Interim Report on the European Recovery Programme. (Paris: Organization for European Economic Co-operation. 1948. Pp. 195. 4*s.*)

This is a disturbing report, for two reasons. It shows the immensity of the obstacles to Western European economic recovery, and it shows how great are the difficulties which lie in the way of overcoming those obstacles by cooperative effort on the part of a large number of independent sovereign nations.

The entire Interim Report comprises three volumes, but the second, the separate national programmes of the members of O.E.E.C., and the third, the reports of the technical sub-committees, need not concern us here. They hang upon the first volume, the report of the Council. This is a well-written volume, made up of short, crisp, numbered paragraphs, easy to understand; and it is in this volume that the basic assumptions underlying all the minutiae of planning and forecasting are to be found. A single programme for Western Europe as an entity has yet to be arrived at; the Interim Report only puts together the separate national programmes. It is possible that, as a result of the central secretariat's enquiries into availability of supplies and similar matters, some steps towards greater realism have been made in some of the national programmes included. But the hardest lessons have still to be mastered.

The first-volume Report starts off with a goodly display of optimism, describing the common hypotheses of all the national programmes as being peace, a high level of world (and, in particular, United States) employment, and a high level of world trade. On this basis, the first half of the argument advances cheerfully enough, but then misgivings begin to assert themselves and, by the end of Chapter 4, a picture has been drawn startlingly different from that with which the Report ostensibly began.

The fundamental problem to be faced, as the Report states, is that the present Western European economy is of a shape which does not fit into the changed pattern of world activity. War has hastened the crisis and deepened it, but "even if there had been no world wars, the course of world development would sooner or later have forced a change in Western Europe's economic structure" (par. 27). This maladjustment shows itself most significantly in Western Europe's adverse balance of payments with the outside world (Western Europe was still paying for only half her imports at the end of 1948) and, in particular, with the United States. Where shall the adjustments be made?

The way which each of the several countries separately would choose, and on which the Report in fact starts out, is the way of further expansion of production along existing lines which, since Western Europe is already highly industrialized, implies for the most part, greater industrialization. This is very reasonable so far as each country individually is concerned. The determination to produce more is wholly admirable and, if greater production requires greater capital investment as in many instances it does, then we have the heartening spectacle of present comforts being firmly set aside for the sake of future stability. So, "the national recovery programmes submitted to the Organisation all have as their essential foundation estimates of production in the various fields of activity, and of the investment that will be necessary to achieve this volume of production" (par. 49). Gross national products in 1952-53 are planned on average to be 20 per cent above 1938 and 35 per cent above 1947. Industrial production, in aggregate now 5 per cent above the pre-war (1935-38) level if Western Germany is disregarded, is to be raised to 30 per cent above pre-war including Western Germany, with items like electricity, aluminum and fertilisers at least double and crude oil output no less than 480 per cent of pre-war. By contrast, agricultural production is planned to exceed the pre-war level by only 15 per cent, and while this implies a very big effort, since present levels are so low, it nevertheless does no more than keep pace with the increase in population.

Lack of availability in certain raw materials will put some check on these programmes. World shortages of timber and of some non-ferrous metals are almost certain and steel, coke, wool and fertilizers are also likely to hamper progress for a time. But the crucial limitations will be in finance: in getting the savings to finance the investment, and in selling the exports to pay for the imports.

The Report is strangely uninformative as to the total of capital investment involved. We are told only that the production programmes require an increase in output per man-hour of 15 per cent over the four years, that for at least 10 of the 19 territories within the Organisation this will involve putting into capital development (internally or in their dependent territories) close on or over 20 per cent of their gross national products, and that modernising existing equipment, expanding existing industries and starting more or less new industries are all involved. But the Report is quite emphatic as to the dangers, political as well as economic, in an investment programme of this size. Despite offsetting American aid and short-term lending by other

non-European suppliers, budget surpluses will be needed in many countries. The margin between private income and private expenditure will be large—dangerously large. "While small reductions of the customary levels of consumption may be accepted, large inroads into customary standards may evoke stronger resistance than can be sustained" (par. 352). It can be argued, of course, and rightly, that "customary standards" are irrelevant, that Western Europe is in no position to support them and that only by heavily foregoing current consumption can their eventual restoration be secured. The fact remains that they can be and very likely will be the dominating factor. Recovery can as easily be upset by political and industrial unrest as by insufficient equipment—more easily. Whilst not denying that the sinking of a large amount of new capital is essential, therefore, one must insist upon two points: first, that the investment should be the minimum necessary to achieve stability (the Report itself finds too much planned for oil-refining and textiles), and secondly, that the amount which can safely be undertaken must be closely correlated with the amount of aid from overseas.

But, given that the practicable rate of new investment must determine the *pace* of expansion, upon *what lines* ought expansion to proceed? Here one can say quite plainly, and with the backing of the Report, that the expansion programmes put forward by the individual countries are not capable of rendering Western Europe "viable," either in 1952-53 or in any year near thereto.

For the industrial targets to be achieved as they stand, imports will be needed, despite import-substitution, in as great a quantity (99 per cent) as before the war. In fact, most countries are planning to import substantially more in 1952-53 than in 1938 (Italy 37 per cent more) and only the heavy cuts by the largest importer, the United Kingdom (22 per cent less), keeps down the average. The cooperating countries, for purposes of the Report, assumed terms of trade 10 per cent worse than in 1938. On this assumption, the import programmes will require 20 per cent more exports than in 1938 and, because of reduced investment income, visible exports no less than 33 per cent more. Of this enlarged volume of exports, it is proposed to make 40 per cent metal and engineering products and 17 per cent textiles.

The Report does not actually say that this is quite impracticable. Formally, it allows that it might be done. But it declares emphatically that results will fall far short of such hopes (20 per cent short) unless there is "a radical change" in the policies of the participating countries, and it warns that, even if the effort to sell exports on this scale is made and succeeds, the payments will not be balanced, because deterioration in the terms of trade would be an inevitable accompaniment. The strongest part of the indictment, however, comes in the numerous observations on the subject which are scattered about the Report. Two only can be quoted here, but these are sufficient to show plainly the mind of the draftsmen of the Report. "It is unlikely that Western Europe can approach its export target without both a large increase in the total world market for manufactures and an increase in the share provided by Western European exports" (par. 187). "The world import market for

manufactures has hardly expanded at all during the last thirty-five years" (par. 243).

What course, then, should be followed? The Report speaks of a "re-orientation of Western European industry" (par. 328). It is not enough, it is argued, just to press forward with exports more vigorously than hitherto. Investments in schemes involving high imports must be curtailed, and—the crucial proposition—"far-reaching plans" must be laid to economise in imported goods.

Disappointingly, though not surprisingly, the Report does not go into details. This is only an interim report, and that work has yet to be done. It is not possible, therefore, to comment upon the economic significance which such a turn would involve. The trend, obviously, is towards more agriculture rather than more industry; but to what extent? Merely marginal adjustments or a wholesale switchover? Mainly in the dependent territories or mainly within Western Europe itself? "Re-orientation" is a strong word, and if changes are to be large, they are likely to have serious implications for the standard of living of Western Europe—implications, for example, regarding the optimum size of population—which have not so far been discussed.

It is certainly clear from the Report that the changes required in plans are on a substantial scale. This alone is a serious matter. Rightly, no doubt, the United States has laid upon the European countries themselves the task of drawing up the plans for their economic recovery and, further, of judging among themselves how they should recommend the division of American aid. The strain which this involves, on both O.E.E.C. secretariat and the governments concerned, must not be underestimated. Western Europe is not a sovereign entity but a group of 19 territories, all of which (except Trieste and, in some degree, Western Germany) are independent of each other, and most of which have heavy political problems which narrowly limit their field of action. For these, a policy of expansion along existing lines, besides being the easiest to imagine and to set figures to, is also politically the most attractive. "Re-orientation," however mild, is bound to disappoint many expectations. It will be challenged by many group interests and political dissension could be gathered against it very easily.

National economic planning is, in practice, neither so logical nor so overpowering as to disregard these facts. Individual countries are not likely to be eager to change their plans. At the same time, the central secretariat of O.E.E.C. is in no strong position to impose its views. It is true that Western Europe as a whole must fail to reach solvency if all countries persist in following the courses upon which they have started. Nevertheless, *some* countries might succeed, and each may think it has a chance. The central secretariat cannot allocate success and failure in advance. Its "planning" role must principally be that of honest broker in some very hard bargains. Whether bargaining is, in fact, possible and whether a sensible result will come out of it remains for the next Report on Economic Co-operation to show.

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Readings in the Theory of International Trade. Selected by a Committee of the American Economic Association. (Philadelphia: Blakiston. 1949. Pp. xiv, 637. $4.50.)

This is the fourth volume in the Blakiston Series of Republished Articles in Economics. The American Economic Association has in this case delegated the responsibility for the selection of essays to a committee with Howard S. Ellis and Lloyd A. Metzler serving as co-chairmen. The present volume includes, in addition to an introduction written by the co-chairmen, twenty-three articles on the *theory* of international trade. Empirical studies have not been included in this collection; the valuable bibliography appended to the text does, however, cover the entire subject matter customarily regarded as international economics. To indicate the general scope of the volume, it might perhaps be appropriate to list the sections into which the articles have been classified: Equilibrium of the Balance of Payments, Foreign Exchange Rates, Theory of Income Transfers and Reparations, Business Cycles and International Trade, Price Theory and International Trade, Tariffs and the Gains from Trade, Other Aspects of Commerical Policy, International Investment and the Balance of Payments, and the Future of World Trade.

As far as the selection of articles is concerned, it is, in the reviewer's opinion, excellent. However, every reader of the volume will undoubtedly have his own pet ideas with respect to unfortunate omissions. On this reviewer's own list are one or both of the articles by A. P. Lerner on the diagrammatical representation of cost and demand conditions in international trade.

A detailed appraisal of the collection is not easy. The scope is so wide and the variations in methodology and degree of abstractness so great that meaningful generalizations are difficult to make. Instead, a few observations on recent development in the theory of international trade, as reflected in the present volume, might be appropriate.

The most important impression one gets from reading this book is how significant the interwar changes have been in this field. The reasons for these changes are easy to ascertain. In the first place, they are related to the great instability in the national economies since World War I and the concomitant instability in the field of foreign economic relations. The first sections of the book clearly show the effects that actual events have had on the development of the theory. To mention a few examples, the difficult concept of international equilibrium has been subjected to detailed analysis by Nurkse. Similarly, the lack of stability in the foreign exchange markets has led to a series of studies culminating in Joan Robinson's essay. The German reparations problem gave rise to the famous Keynes-Ohlin controversy, reprinted here, which has added to our understanding of the balance-of-payments mechanism. This controversy can be reread with benefit by students of postwar economic problems.

While actual events have played an important role in the development of a new body of thought, theoretical innovations have also been associated

with advances in other branches of economics. To quote from the Introduction: "The new developments in price theory, as well as those arising out of the theory of employment, were quickly applied to the special problems of international economics, and many of the articles and essays reprinted in the present volume reflect the influence of one or both of these changes." It should perhaps be added that the causation has also run the other way, *i.e.*, innovations in the field of international economics have in turn stimulated development in other fields of economics. Scitovszky's article on the theory of tariffs may be mentioned as an example. This is, of course, an old phenomenon as any student of the history of economic thought is well aware.

The new theory of employment has led to a better understanding of the equilibrating mechanism in case of balance-of-payments disturbances. Metzler's articles on the transfer problem and Salant's on the foreign trade multiplier and the business cycle are good illustrations of the usefulness of some of the new theoretical tools. Polak's excellent essay on international investment also makes use of the multiplier analysis.

The influence of modern price theory on the pure theory of international trade is less spectacular. To quote again from the Introduction: "The pure theory of international trade was sorely in need of improvements which would bring it abreast of modern price theory. It is surprising, nevertheless, to find that the improvements in international price theory, when they were finally made during the inter-war years, affected the basic conclusions derived from classical theory only to a moderate extent." Unsolved questions still remain in this field. Both Leontief and Scitovszky use community indifference curves, the theoretical validity of which has been questioned by some economists. Samuelson, on the other hand, has been able to dispense with this device in his treatment of the problems of gains from trade, but his article does not make it clear whether his method has more general applicability. The theory of production and distribution has also found useful application in the field of international trade as witnessed by the remarkable paper by Heckscher, originally published in Swedish in 1919, and the recent article on the same subject by Stolper and Samuelson.

The articles mentioned above are by no means the only ones that deserve attention. They have been singled out for two reasons: to indicate the scope of the volume and to emphasize certain trends. In the reviewer's opinion, the economic profession can derive a certain satisfaction from the anthology. It gives evidence of rapid and sometimes striking advance in this branch of our science. Yet important problems remain to be solved. For example, the implications of increased government participation in foreign trade have not yet been full explored. At least a significant beginning has been made in the articles by Viner and Mikesell. Perhaps most important, further progress may come with a bridging of the gap between the monetary and the so-called pure theory (comparative cost) aspects of international economics. It is likely that an integration somewhat similar to that which has resulted in the modern theory of employment will increase our knowledge and understanding of the subject.

Finally, this collection has, as did its predecessors, obvious merits for teaching purposes. This advantage is particularly great since many of the recent innovations in this field have not yet been embodied in textbooks. Especially if read in connection with Lloyd A. Metzler's admirable article, "The Theory of International Trade," in *A Survey of Contemporary Economics,* it will give the non-specialist an opportunity to keep abreast in this branch of economics.

SVEND LAURSEN

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World in Transition. By G. D. H. COLE. (New York: Oxford University Press. 1949. Pp. xix, 646. $6.00.)

World in Transition is an outstanding book in more ways than one. The very scope of its subject is extraordinary, for Professor Cole has sought to describe the important economic, social and political happenings of the last decade, not in a single country, but throughout the world. There are chapters on everything and everywhere, with a special chapter on "The Right to Work," on "Europe, America, and the World," on "Trusteeship, the Color Bar, and the Colonial Problem" on "Morals and Politics and Democracy," and on twenty-four other assorted topics. The style is breezy but the pace is hot. A rough but fair caricature of the skills which Professor Cole brings to his typewriter is to describe them as partly reminiscent of qualities more familiarly displayed by John Gunther, Lancelot Hogben, and Stuart Chase.

The main defect of the book—paradoxical as it may seem—stems from the author's very virtues. Professor Cole is a moral man. He believes passionately in the brotherhood of man and in a universal obligation to further the material well-being and human dignity of this world's inhabitants. For many years Professor Cole has vigorously sought these goals through the British Labor Party, the Fabian Society, and the publication of many articles and books. In the past his writings have often been directed towards persuading as well as informing and this latest work is in keeping with tradition. Some people, who hold opposite views from those of Professor Cole, would describe parts of the book as propaganda; others, who believe as its author does, would call them educational.

Certainly *World in Transition* is not written in an impartial vein. It contains many flat statements on doubtful matters. The following two quotations, while selected for their possible interest to American readers, are typical. First,

> . . . today few economists would deny that the State can and should accept responsibility for maintaining employment at a satisfactory level. . . . There are no doubt still a few professional economists, . . . who cling to the notions of laissez-faire . . . ; but, except perhaps in the United States, where the old errors persist, these reactionaries have lost their title to orthodoxy and have taken to giving themselves the air of men ready to die in the last ditch for the grand old cause of property rights (p. 13).

Second,

> . . . so much hostility has been shown in the United States to all forms of public control over private business that other countries must be on their guard. Nothing can be more certain than that America, if it does finally scrap all the controls and return to the unfettered rule of big business, will be back in a jiffy at the old speculative game, with consequences even more disastrous for the rest of the world than for the American people. . . .
>
> This is not to say that, in the absence of disturbing forces from the United States, capitalist enterprise elsewhere would proceed on an even keel. The American economy merely reproduces in a more exaggerated form the tendencies to instability which are everywhere inherent in the system of profit-seeking investment (p. 386).

If it is objected that such assertions are outrageously subjective, one should remember that the author's emotions do help to render the otherwise ponderous material both lively and readable.

Moreover, Professor Cole does not pretend to be writing detachedly for scientific economists. He is a professor of social and political theory at Oxford and the title of this considerable position is probably significant. In view of these wider concerns of the author, it is difficult to review this work for economists except in a similarly subjective manner.

In all probability *World in Transition* accomplishes what its author desired and attempted. It throws a light of decency and common sense on more than one dark spot in our troubled world. It contains a great deal of up-to-date information. What is more, the when's and how's and where's presented the reader are significant facts; most of the statistical dross which has a way of sifting into all books of this kind has been satisfactorily excluded. A lesser author would certainly have needed more than 300,000 words and a 35-ounce book to do this subject justice.

The writing of such a book, one which is not only global but contemporary in its coverage, must be a tremendous task. In the Preface it is stated that the entire work has been rewritten at least twice, and parts of it half a dozen times, in order to keep the material up-to-date. One stands in awe, not only of Professor Cole, but also of Rosamund Broadley, his secretary.

Finally, the British edition of this book was entitled *The Intelligent Man's Guide to the Post War World,* and in many ways this other title aptly posed a dilemma and its solution. Professor Cole knows his terrain, would like to be a guide, but occasionally leads off to the left. However, does this matter, when The Intelligent Man can always refuse to follow?

STEPHEN ENKE

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The United States and Foreign Investment Problems. By CLEONA LEWIS. (Washington: The Brookings Institution. 1948. Pp. xviii, 359. $4.00.)

The economist deals in theory, realistic generalization, and policy—one at a time or in appropriate combination. This volume, a companion to Miss

Lewis' earlier *America's Stake in International Investment,* is little concerned with theory but it has things of some importance to say under the other two headings.

Theory is touched upon in the early pages but the theoretical implications of the subject are not developed. Miss Lewis starts with the statement that foreign investment is the payment abroad of some part of the national income of the investor country, but the income approach is not carried beyond this initial statement. The outpayment, we are told, must be translated into the export of goods and services, but no further attention is given to the problem of transfer.

Realistic generalization is at the center of Miss Lewis's interest and her contribution in this field is much broader than the title of her volume would lead one to expect. In fact she undertakes a general estimate and review of international investments from the late 'thirties to the present time. To appreciate the inclusiveness of her task the reader should turn first to Appendix A where he will find a careful estimate, as of 1938, of the international long-term "investments" and "obligations" of practically every country in the world. In Part I of the text this review is brought down to 1947 in so far as available information permits, but the foundation of the whole exposition is in Appendix A. In this appendix the investment relation of every country with every other country is presented. Form and use are given attention. The creditor or debtor status is set forth for individual countries and for regions or areas. Much solid work has gone into this survey for 1938. It was necessary to bring a stubborn and perplexing assortment of facts into an orderly and consistent statement. Miss Lewis has done this and her work will be used by every student of the subject.

A general survey of this sort no matter how much work may have been put upon it, seems unsatisfactory when it has been brought into final form because it cannot be complete and because realistic study raises more questions than can be answered without further study. I propose to turn away from any effort at detailed criticism and to put forward a few of the general questions suggested by the survey.

International investment was presented in the opening pages as unilateral outpayment from the investor country. Such a statement emphasizes the flow of funds and the investment of goods; and a flow or movement must be measured over a period of time. But Miss Lewis did not, in making her survey, attempt to measure a flow. She undertook to arrive at a valuation of holdings—to use a convenient term—at an instant in time. Two concepts of investment are involved here. The contrast is between the process of unilateral payment, on the one hand, and the valuation of an inventory of holdings, on the other. Why, it may be asked, has theoretical analysis emphasized the process, and realistic study the inventory?

A further and closely related question may be raised. The contrast between the two concepts of investment seems to be significant when it comes to the judgment of capacity which Miss Lewis deals with from the point of view of the United States in her second chapter. Is the world's capacity to

bring about international investment to be judged by the facts related to payment? Consider the $60 billion of unilateral outpayment from the United State since 1939 (p. 30). Or is capacity to be judged by the possibility of bringing into existence holdings which the receiving country expects to be able to service? Consider the net increase in the foreign holdings of the United States since 1939 which Miss Lewis puts at $12.4 billion (p. 35). Is it capacity to pay or capacity to receive that counts?

Another general problem concerns the place of short-term investments in a survey of international holdings. Miss Lewis leaves short-term investments out of her review for 1938 and it seems quite reasonable to do so. To include them would no doubt have disturbed the long-run investment picture. But she brings in short-term investments when she undertakes the exposition of the course of events since 1938. She deals neatly with the British case and reaches the conclusion that by 1947 British long-term net holdings of about $9 billion were completely offset by British net short-term liabilities (p. 63). By the same method the conclusion is reached that the United States emerged from the war a net debtor in the amount of about a billion dollars. Such conclusions are significant when the net position of a country is the important matter, but this is by no means always the case. They do not touch such matters as the ownership of the world's oil wells or the railway development of the world.

Is it not preoccupation with "netness" which brings short-term investments into the long-term investment picture, and may not this preoccupation cause other aspects of long-term investments to be overlooked? The usefulness of a highway is not to be judged by the net movement of vehicles in one direction or the other.

Miss Lewis's survey is followed by an account of the part which foreign capital has played in the development of the world's resources. This, in turn, serves to introduce problems of policy to which much of Part II and the whole of Part III are devoted.

Policy in investment-receiving countries is examined with appropriate emphasis on the unhappy progress of the world from default to expropriation. Attention is given to governments as investors with fresh information on direct investments by governments and a valuable discussion of policy. War and Communism have made this a problem of growing importance.

American policy from the beginning of World War II to the operations under ECA is presented in some detail. Miss Lewis reports without much comment the steps by which American loans have become, in Senator Vandenburg's phrase, "integral factors in our foreign policy." Efforts to deal with policy, however, toward new private investment are overshadowed by the persistent importance of the activities of the United States government. One is driven to the conclusion that Miss Lewis finds the chief hope for economic development by means of private investment in the establishment of a "generally acceptable code and court."

Her final chapters are upon the various proposals for an investment code. She gives attention to two efforts. The first is in the charter of the proposed

International Trade Organization. This she is inclined to regard as unsatisfactory (pp. 264, 265). The second is in the economic agreement at Bogota which, if it is ratified, will in her opinion constitute "a very real step" toward a satisfactory code.

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European Recovery Program—A Report on Recovery Progress and United States Aid. By The Economic Cooperation Administration. (Washington: Supt. Docs. 1949. Pp. ii, 267.)

This document was produced by ECA as the focus of its presentation to the 81st Congress in support of its request for a renewal of its authorizing legislation and a new appropriation. It is designed for reference, rather than consecutive reading, and doubtless served a function in the congressional hearings in enabling the witnesses testifying for the executive branch of the government to answer many questions put to them through citation of explicit material.

While the encyclopedic character of the document and its compression make it easier to thumb through than to read systematically, it contains much of interest. Attention is called to the discussion of local-currency counterpart funds (pp. 157 ff.) where the action taken in each country is reviewed. It would appear that control over these funds has proved neither a means whereby the United States can dominate the European country nor a very effective support for fiscal orthodoxy. The section on exchange rates (pp. 188 ff.) is confined to a few pious platitudes which skirt the core of this controversial matter. This is probably unavoidable in a document of this sort. Some other controversial issues like the 50-50 rule on division of grant-cargoes between American and foreign bottoms are treated thoroughly; others like the pricing problem in oil, which was subsequently treated fully in the Hearings before the Committee on Foreign Affairs, are referred to only in passing.

An important by-product of the European Recovery Program for the profession has been the mass of information, current, historical and prospective, on the economic affairs of Europe. On occasions, one is tempted to believe that the point of diminishing returns has been reached. While the present document lacks the broad appeal of the OEEC Interim Report on the four-year program, it falls well within the compass of material for study and reference.

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La Fortune Américaine et son Destin. By JEAN PIEL. (Paris: Editions de Minuit. 1948. Pp. 228.)

This book is important in showing how an intelligent, well-informed and somewhat cynical European looks at American economic policy and particularly the Marshall Plan. The first half of the book deals with the "secret" of American prosperity, which the author finds in our great natural resources,

in the glorification of work—a contribution of Calvinist theology—and in the spirit of enterprise, a contribution of immigrants from Europe. Having explained the growth of economic power, he turns to the vital question for Europe, "What will America do with it?"

The United States, according to M. Piel, is a mature economy perpetually menaced by overproduction. Rearmament and wars afford only temporary relief. One avenue of escape is government intervention, economic planning. But if the free-enterprise system is to be preserved, foreign outlets must be provided. The United States has great export capacity, but other countries lack means of payment. Investment of American capital abroad is only a short-run remedy, unless it takes place on an ever-increasing scale so as to compensate for amortization, the return of interest and dividends. This is impracticable, for "the new capital annually necessary would exceed the total savings of the country." The only alternative, if capitalism is to survive, is to give away American wealth to foreign countries, on a massive scale, as a permanent feature of American policy.

The Marshall Plan is thus explained as a necessary step to preserve American capitalism. This argument would not have swayed American Congressmen of an isolationist stripe, hence more and more openly the Plan was presented to Congress and to the American public as a means of fighting the Soviets and "a necessary means of limiting their expansion."

All of the foregoing corresponds rather closely with standard Communist arguments. Yet neither the author nor his publishers identifies him with the Party. Furthermore, in speculating on the future he does not adopt the Russian thesis of the inevitable collapse of American capitalism. An acute crisis may impend which will profoundly change it, but he sees a decreasing possibility of a socialist regime.

The author's economic determinism prevents him from recognizing the strength of ideas and ideals behind our participation in European affairs, and to European readers the book will give a false impression of the motivation of American policy. For political and humanitarian reasons we are attempting to stop the spread of Communism; economics is the means, not the end, as M. Piel maintains. For Americans the book is instructive in showing the need for clarifying our intentions and for dispelling suspicion on the part of Europeans that our continued aid may carry with it undesired control of their affairs.

PERCY W. BIDWELL

New York, N.Y.

The Most-Favored-Nation Clause: An Analysis with Particular Reference to Recent Treaty Practice and Tariffs. By RICHARD C. SNYDER. (New York: King's Crown Press. 1948. Pp. xi, 264. $2.75.)

A number of books on the most-favored-nation clause are available in foreign languages, particularly French, but Professor Snyder's book is the most complete one to appear in the English language. He opens his discussion with three preliminary chapters devoted to the nature of the most-favored-

nation clause itself. Following this he presents a definition, classification, and analysis of the various forms of the clause. The book is concluded with an analysis of the limitations and exceptions to the clause and finally with an evaluation and criticism of the clause.

In his preface, the author tells us that he has made an attempt to synthesize the outstanding secondary materials concerning the most-favored-nation clause. Although he has done this with considerable skill, and although one must be grateful for the thorough manner in which he has reviewed the secondary sources available only in French, a perusal of the book will convince one that the author's statement is too modest. One of the most valuable parts of the book is based on a most painstaking analysis of the texts of hundreds of treaties. This study of texts has enabled the author to prepare a much more satisfactory classification of the various forms of the clause than has been available previously. It has also added a richness of interpretation to the analytical parts of the study. In this connection copious documentation adds to the usefulness of the book for further reference.

The author's training lies in the field of political science. A large part, therefore, of the material in the book concerns the legal aspects of the most-favored-nation clause rather than the purely economic aspects. The student of economics, however, cannot afford to neglect the political and legal implications of the various interpretations of the clause, nor will he overlook the important contributions made by the author to the study of the economic significance of the clause.

Issue may be taken with certain of the statements made in the sections of the book dealing with the economic aspects of the most-favored-nation clause. Not all students will agree that "So far as the principle of equality of treatment is concerned, a high but uniform tariff diverts trade to a lesser degree than low but discriminatory tariff" (p. 198). This statement is essentially the same as the argument frequently advanced in the United States during the early 1930's when invidious comparisons were drawn between the American and the British tariff structures. The American tariff was high, but for the most part uniform. The British tariff was low, but after the Ottawa Agreements of 1932 discriminated sharply in favor of Canada and against the United States. Americans frequently argued that the British tariff was the more serious.

Two observations are in order. In the first place, the statement concerning the extent of trade diversion is meaningless unless we know how "high" or "low" the tariffs are in relation to cost of production differentials in the countries concerned. In the second place, such statements represent a confusion of thinking between foreign trade and total trade. When the United States raised the prohibitive rates of duty in the Fordney-McCumber Act to still higher rates of duty in the Hawley-Smoot Act there was no apparent diversion of foreign trade on many products because imports had been effectively curtailed on these products before the new higher rates became effective. It is idle to argue that such tariffs did not divert trade. Equality of treatment,

though politically desirable, does not necessarily mean equally good treatment; it may, and oftentimes does, mean equally *bad* treatment.

Noticeably lacking in the book is the recognition that the American interpretation of equality of treatment in the reciprocal trade agreements program went considerably beyond the conventional interpretation of the unconditional most-favored-nation clause. Under the usual interpretation (assumed, for example, on page 203) treaty rates are generalized to all nations with whom a country has unconditional most-favored-nation obligations. The American policy, however, was to generalize to all nations the concessions made, regardless of whether specific most-favored-nation obligations existed, provided the nations were not discriminating against American trade. The only major countries not receiving benefit of the reduced rates of American trade agreements were Germany and Australia. Certainly a policy of this sort has significant implications in the development of the most-favored-nation clause.

The defects noted in the previous paragraphs are minor. The book as a whole is most useful and is carefully written. The book is printed in photo-offset lithography and has not been carefully edited and proofread. This fact explains the larger number of minor typographical errors contained in this book than ordinarily would be tolerated on the printed page. It has, however, made available to scholars generally a good book at a moderate price that might otherwise either have been printed much more expensively or have remained in manuscript form in a university library.

CARL KREIDER

Goshen College

Industrial Organization and Markets; Public Regulation of Business

Managerial Enterprise: Its Growth and Methods of Operation. By OSWALD KNAUTH. (New York: Norton. 1948. Pp. 224. $3.00.)

"Managerial enterprise" is the author's name for the oligopolies which "dominate the vital half of our economy." He distinguishes it from small-scale "free enterprise," for which he has little use, by noting such characteristics of managerial enterprise as sunk capital, relative rigidity, separation of ownership and management, power of each unit to affect the market, and adjustment of production (rather than price) to changes in demand, all directed to the goal of "a stable and adjustable system, the functioning of which creates profits" (p. 33). He thinks we should clear our minds of obsolte objections to these features, and recognize the merits of enterprises exhibiting them. These merits, summarily, are stability, high productivity, and sufficient power to stand up to government (which presses toward a third form of economic organization, collectivism).

It is not easy to administer the great organizations which confer these benefits upon us. The manager is in a lonely position, umpiring the claims of labor, shareholders, and customers. His responsibility is to deal with them, as well as with rivals and suppliers, so as to maximize, not the profits, but the stability of the enterprise. The resulting satisfactions to the manager are few,

because the goals are so long-run that no individual can see them realized.

The manager of a substantial retail enterprise finds it especially difficult to consolidate the "trade position" required for stability, because retail customers are fickle and some of them are critical. Elaborate and costly measures must be taken to prevent good-will from turning into ill-will. "Advertising policy is dominated by fear. . . . It is the fear of losing their place in the economic structure that spurs organizations to excessive and apparently wasteful expenditures" (p. 67). The managers of heavy industry meanwhile must be busying themselves with building up technological advantages buttressed by patents, with forging long-term exclusive arrangements, and with cultivating established connections.

One reason why constant courtship is essential to woo demand is that "Every other expedient is tried before prices are tampered with" (p. 129). True, many of the expedients conceal cuts, but the necessity for concealment illustrates the sanctity of the stable established price. The resulting market price in managerial enterprise is not one that will clear the market (a phenomenon also noticed by an English observer; see Saxton, *Economics of Price Determination*, 1942, Chap. I). Again the retail consumer is especially troublesome, because he is "as free as air." But "the edge the buyer has on the seller may be whittled away. And this indeed is the prime objective of salesmanship. The seller brings pressure on the buyer in every way possible—by creating demand through forming habits, advertising, demonstrating, 'full-line forcing,' and tie-in arrangements" (p. 109). And, as a last resort, by tampering with prices.

Outmoded legal concepts of monopoly also plague the manager, though "only enough [appropriations are] voted to give the Anti-trust Division a nuisance value " (p. 175). The suggested remedy is a legislative overhauling of the Sherman Act, to mark out the difference between managerial enterprise and exploitative monopoly. The test for illegality would not be power, but the abuse of power, to be found when the purchaser is deprived of freedom of choice to buy elsewhere.

I take the foregoing to be the author's major theses. I have presented them in stark outline to suggest the significance of his little book. The author has drawn on his training as an economist, and on his long experience in department-store operation, to evolve a reasoned defense of management-controlled oligopoly. His observations range over many aspects of management not touched on here. The examples, drawn largely from retailing, make the work a useful companion-piece to Drucker's much more brilliantly executed *Concept of the Corporation,* which explains General Motors.

By and large, the deficiencies of *Managerial Enterprise* in execution are outweighed by its admirable candor. But realism in detail, and disrespect for the slogans of free enterprise, NAM-style, do not atone for decidedly clouded goals. One leaves Mr. Knauth's book with grave doubts about what he is driving at in the way of an economic philosophy. In his conclusion, after lamenting the mishandling of NRA, he calls for a new attempt to formulate codes and standards for business. "As codes of behavior are worked out and

lived up to, the stability which managerial enterprise gives and the initiative it must exercise to hold its position may enable it to ward off the encroachments of harmful social forces. These two characteristics, stability and initiative, make managerial enterprise the form of economy that holds the most promise of serving the manifold needs of our progressive society" (p. 213). The reader is left to ask who is to work out these codes and enforce them? To whom are the encroachments of social forces harmful? May not Mr. Knauth's brand of stability produce stagnation rather than initiative? Will stable enterprises produce national stability in the absence of fiscal and other measures aimed at maintaining national income at high levels? And if such measures are successful, do we need to be so solicitous of the integrity of the enterprise? One final question, not so idle as it sounds: does the protection of the enterprise serve the needs of society, or is society to serve the needs of the enterprise?

RALPH S. BROWN, JR.

Yale Law School

Commodity Exchanges and Futures Trading. By JULIUS B. BAER and OLIN GLENN SAXON. (New York: Harper & Bros. 1949. Pp. xii, 324. $5.00.)

This is a work of uneven quality. Here it is authoritative; there it retails ideas of others with little discrimination; and once, at least, it deals in pure fancy as though it were fact. The style is in part direct, clear, and scholarly; and in part repetitious and superficial. Broadly speaking, the chapters on legal aspects, if this reviewer judges correctly, are excellent; technical description is good; and the economic discussion is open to considerable criticism.

In scope, the book goes much beyond Emery[1] or Hardy,[2] whose discussions of futures trading touched chiefly the associated broad economic questions; it, therefore, invites comparison with Hoffman[3] or Smith,[4] and especially with the former, which also is concerned almost wholly with futures trading in the United States. The topics treated are broadly the same as in Hoffman with one noteworthy exception: the present authors add three chapters on legal questions related to futures trading. These make a substantial contribution to the literature, and even a layman can see in them the marks of authority. Other main topics are compressed into little more than half the space given them by Hoffman, largely by omitting various sub-topics and dismissing others with a sentence or two. Repetition of old answers to ill-informed criticisms of futures trading, however, seems to occupy considerably more space than in Hoffman.

The authors put their worst foot forward. Chapter I, "Historical Development of Commodity Exchanges," gives eight pages to the history of fairs

[1] H. C. Emery, *Speculation on the Stock and Produce Exchanges of the United States* (Columbia University Studies in History, Economics and Public Law, Vol. VII, New York, 1896).

[2] C. O. Hardy, *Risk and Risk-Bearing* (Chicago, 1923; 2d ed., 1931).

[3] G. W. Hoffman, *Future Trading upon Organized Commodity Markets in the United States* (Philadelphia, 1932).

[4] J. G. Smith, *Organized Produce Markets* (London, 1922).

and markets from ancient times, and twice as much space to a miscellaneous collection of other topics. It includes no real discussion of the history of futures trading, but makes the astonishing statement, quite without support, that "The [futures] exchange was conceived and established as a new instrument to perform *insurance* functions in commodity markets and offer protection against various risks which market operators could not secure through the regular insurance companies or otherwise."[5] Some substantial historical information on futures trading does appear in Chapter VII, "The Futures or Exchange Contract," and a little more in the next chapter, but with no citation of sources. The beginning of futures trading is wrongly dated on first mention (p. 131), but an acceptable date, 1865, is given later (p. 144).[6]

Discussion of economic questions associated with futures trading, in the first third of the book, labors preceptibly under the handicap of failure previously to define futures trading, either formally or through any clear account of its origin. Clarity of the definition finally given suffers from quotation first of two less adequate definitions, and from an attempt to draw a sharper line than actually exists between futures and other forward contracts. The attempt to reinforce the distinction by substituting the term "exchange contract" for "futures contract" seems to me ill-advised. Much of the awkwardness arises from the authors' apparent unwillingness to admit that futures trading gets its characteristics in substantial part from dependence on speculative interest.

The tone of the earlier chapters seems to reflect primary concern with defense of futures trading. If the discussion at times appears to risk insulting the intelligence of a normal college freshman, answer may be given that it is at least on a level with the intelligence of the criticisms considered, some of which have been made by high government officials. Such treatment of the criticisms seems to me, nevertheless, ill-conceived. When people of undoubted intelligence resort to ill-founded criticism, it must be assumed that they do so usually because they believe that valid grounds exist for criticism, but grounds beyond the understanding of people whom they wish to influence. Such criticism cannot be met effectively on its own level; it must be met on levels which will appeal to the leaders of opinion, and so check the influential criticisms at their source. The merits of futures trading involve issues too technical and too intellectually difficult to be tried in a court of low intelligence.

If this is a correct view of the problem, the authors have erred even more by omission than by commission. Relying heavily on citations from distinguished economists, who have always, from the time of John Stuart Mill at least, provided the main source of defense for speculation, the authors ignore the fact that the climate of economic opinion on the subject has

[5] P. 12. Italics are the authors'.

[6] In his *History of the Board of Trade of the City of Chicago*, Charles H. Taylor, a member of the Board of Trade from 1868, characterizes an action of 1865 as "formally adopting the principle of trading in 'futures,'" and adds, "For at least ten years [before] . . . a large business in futures had been transacted. . . ." (*Op. cit.*, I, 332; see also *ibid.*, pp. 192, 193.)

changed greatly in the last twenty years. They make no mention of the trenchant criticisms which Keynes directed against speculation, or of the criticisms by other able, if less distinguished economists. This tends to give the impression of inability to meet the criticisms.

This is particularly unfortunate because the criticisms are quite capable of being met, though they cannot be conclusively refuted from present evidence. Clear resolution of the issues must wait on further empirical research, which ought to be going forward more rapidly than it is. But the authors might at least have shown that the intelligent criticisms rest on deductions which may be quite mistaken.[7]

If the excellent treatment of legal questions is open to any adverse criticism, it is beyond the perception of the present reviewer. The discussion of trading practices makes an unfortunate choice in treating the important subject of relations between spot and futures prices (Chap. XII) in terms of the obscure and confused "basis" terminology of the cotton market. It might have been treated much more clearly, as by Hoffman, in the language of "premiums" and "discounts" used in the grain trade. As regards influences affecting these relations, the authors quite naturally follow traditional theory, which the present reviewer has found seriously in error.[8]

In short, this is a book which makes some important contributions to its subject; it may serve a useful purpose as a popular presentation of defenses of futures trading; but as a college text or reference work, it has serious shortcomings, which require that it be carefully supplemented.

HOLBROOK WORKING

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[7] See, for example, "Futures Trading and Regulations," (discussion of a paper by G. Wright Hoffman) *Jour. Farm Econ.*, Vol. XIX (1), (Feb., 1937), pp. 309-12; and as regards some possible lines of research, "The Investigation of Economic Expectations," *Am. Econ. Rev.*, Papers and Proceedings of the Sixty-first Annual Meeting, Vol. XXXIX, No. 3 (May, 1949), pp. 150-66, both by the present writer.

[8] "Theory of the Inverse Carrying Charge in Futures Markets," *Jour. Farm Econ.*, Vol. XXX (1), (Feb., 1948), pp. 1-28.

Studies in War Economics. Prepared at the Oxford University Institute of Statistics. (Oxford: Blackwell. 1947. Pp. 410. 25*s*.)

This book contains a collection of 53 articles reprinted from the Bulletin of the Institute of Statistics and a few other British periodicals, which appeared during the war years. The reprinted articles are grouped in seven sections: (1) Economic mobilization and general controls, with contributions by I. Bowen, G. D. N. Worswick, T. Balogh, J. Steindl, F. A. Burchardt and M. Kalecki; (2) War finance, with articles by H. Durant, J. Goldman and others; (3) Consumer's rationing and price control, with articles by Kalecki, J. C. Nicholson, S. Moos and others; (4) Wages and national income (Nicholson and others); (5) Consumption and prices (T. Schulz, G. H. Daniel and others); (6) Industrial organization (P. Ady and others); (7) War contracts and efficiency (Steindl, Kalecki and Worswick).

The various articles deal with the issues of British economic policy that arose during the second world war. Some of them have a narrow focus and the form of editorials. Others give accounts of the development of policies and controls. Some are abstract theorizing and others provide detailed descriptions of institutions or analyses of statistical data.

The purpose of the book is to make the articles more readily available since "the circulation of the Institute's *Bulletin* was limited and back numbers have long since been out of print." Their re-publication in book form may be of help to students of the British war economy and, in a few instances, to students of more general and contemporary economic problems. Beyond this service the book offers no contribution. It would have been made more useful by the application of some editorial effort. Articles might have been prefaced with summaries of the developments leading up to the problems they discuss. The ideas of some of the authors might have been put in perspective by references to conflicting views or to their effect on policies. As it is, this is a bundle of reprints—several of them worth having—but it is not a book.

HORST MENDERSHAUSEN

New York, N.Y.

Politics and Poverty. By LEWIS C. ORD. Foreword by P. MALCOLM STEWART. (New York: Funk & Wagnalls. 1948. Pp. xii, 188. $3.00.)

Since the end of the war we have seen an intensive interest in the question of industrial productivity, particularly in Great Britain. One of the first acts of Sir Stafford Cripps as chairman of the Board of Trade in 1945 was the appointment of nearly a score of "working parties" to investigate productivity in their respective industries and to report findings and recommendations. At the same time, several technical missions were dispatched to the United States to study American methods.[1] Just now we have a series of visiting "production teams" touring this country under the auspices of the Anglo-American Council on Productivity.

We are indebted principally to Dr. L. Rostas, of the National Institute of Economic and Social Research, for statistical analyses of productivity in the two countries, presented in his recent work, *International Comparisons of Productivity in British and American Manufacturing Industry*.[2] In the field of non-statistical comparison, however, no one has done more than Lewis C. Ord, author of the work under review. As a production engineer with extensive experience in England, Canada, and the United States, he has had an uncommon opportunity for observation and speaks, accordingly, with unusual authority.

In his earlier book, *Secrets of Industry*, Mr. Ord analyzed the organization and mechanics of mass production as practiced here and in England, pre-

[1] The reports of these working parties and technical missions have been summarized briefly in *Technological Stagnation in Great Britain*, Machinery and Allied Products Institute, 1948.

[2] Macmillan (London), 1949.

senting a general critique of industrial efficiency in that country. The present work, though overlapping the earlier one to some degree, is concerned, as the title indicates, primarily with the non-mechanical factors underlying the backwardness of British production—the restrictionism practiced by trade unions and industry, nepotism and the caste system in management, the lack of technical education, stuffed-shirt directorates, and above all, the absence of a national antitrust policy.

Mr. Ord is a vociferous critic of over-centralized planning and administration, whether industrial or governmental. Needless to say, he is an uncompromising opponent of Socialism, in all its forms. That his views would cheer and confirm the most zealous proponent of free enterprise may be indicated by a brief quotation:

> Ignoring the countries in between, there are two sharply opposed national systems which direct the businesses of a nation. These businesses may be completely planned and ruled from the top, without competition, as in Russia. They may be kept sharply competitive, decentralized, and lean at the top, as in the United States. . . . Were these two systems used to operate the industries of two countries, each of them equal in tools, equipment, technical efficiency, workmen, managers, and everything else, one system would produce double the prosperity for the people that could be obtained under the other. . . . The British Government have chosen the least efficient of these two industrial systems as their ideal and model.

The book suffers, unfortunately, from certain literary defects. It is poorly organized and repetitious. Nevertheless, if the reader is not too impatient with its shortcomings, he will find it an interesting and provocative discussion by one of the few men qualified by personal experience to engage the subject.

GEORGE TERBORGH

Washington, D.C.

The Sugar Industry and the Federal Government: A Thirty Year Record (1917-47). By JOSHUA BERNHARDT. (Washington: Sugar Statistics Service. 1948. Pp. vii, 344. $3.90.)

Dr. Bernhardt presents in his book the development of the policy of the federal government with respect to sugar during the thirty-year period beginning with the government contol of sugar in World War I.

The book is divided into four parts. In Part I, the author analyzes government control of sugar during World War I. Part II covers the period of high-tariff protection of the sugar industry during 1921-1934. Part III presents the federal regulation of the sugar industry during the Roosevelt administration before the entrance of the United States in the war in 1941. And, finally, Part IV deals with government control of sugar during World War II.

The book under review is not really a book written anew by the author. It is partly a collection of Dr. Bernhardt's earlier publications, published separately in economic journals, and partly a collection of government documents, such as reports of various government offices and bureaus dealing with sugar, testimony of the author before various congregational committees, etc. How-

ever, the author participated in some way in the preparation of practically all of those documents during his long and intimate connection with various federal offices dealing with sugar. Some of these documents are signed by Dr. Bernhardt in one or another of his official capacities; others were fully or partly prepared by him. Because of this fact the book represents a certain unity, in spite of the fact that it is a collection of articles and official documents published at different times. Their selection was skillful enough to present in a relatively short space a fairly complete history of the federal sugar policy, and the several important changes that it underwent during the thirty years reviewed.

The inclusion in the first part of the book of the author's earlier publication, *Government Control of Sugar,* published in 1920 and long out of print, may be welcomed since it permits the reader to see to what extent the experience during World War I was utilized by the government in organization of controls during World War II, and to what extent the earlier errors were repeated.

Since the larger part of the book consists of documents, in the preparation of which the author participated officially, and since most of his articles also were written when he occupied one or another official position, the history given in the book is an official history, defending government policies rather than criticizing them. In his defense of government policies, however, the author is always inspired by the public interest.

The book will be useful for the students of the economic history and economic policy of the United States, and may be profitably used as reading for college courses.

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Public Utilities; Transportation; Communications

American Transportation in Prosperity and Depression. By THOR HULTGREN. Stud. in Business Cycles, No. 3. (New York: National Bureau of Economic Research. 1948. Pp. xxx, iii, 386. $5.00.)

This book is written as a planned development of studies by the National Bureau of Business Research on business cycles. Basic analyses of cyclical fluctuations are to be found in Mitchell, *Business Cycles: The Problem and its Setting* and, more recently, in Burns and Mitchell, *Measuring Business Cycles.* In these volumes, and especially in the second, the authors described methods of attack, established a reference scale that distinguished periods of expansion and contraction, and discussed the behavior of selected cycles with respect to duration, amplitude, and other important characteristics. The Bureau now proposes to build upon such foundations by publishing a series of monographs, each of which will seek to establish the cyclical behavior which has been characteristic of an important activity or group of activities. Hultgren's railroad study is the first of these undertakings which has appeared.

Hultgren finds that the length of the cyclical periods in railroad freight transport and the location of turning points conform with reasonable pre-

cision with the established reference scale. There is no great lead or lag. Over the period 1869-1938 ton miles usually reached a peak later and a trough earlier than did business; after 1914, however, the variations were slight except in the case of the depression which reached its lowest point in 1933. Passenger travel showed greater variations from the assumed norm; in the successive contractions and expansions 1929-33, 1933-37, 1937-38, and 1938-40, however, the conformity of passenger, excluding commutation travel, with the reference scale was very close. Hultgren's observations, therefore, testify to the accuracy of the frame of reference with which comparisons are made. There is a good deal of local cross movement within each cycle, but not enough to obscure the character of the cycle as a whole.

Considering further and more particularly the effects of rising and falling traffic upon the physical and financial averages which can be derived from railroad figures, the author reports and explains the facts in great detail. Periods of rising traffic are characterized by heavier carloading, by longer trains and heavier trainloads, and by a record of more miles and ton-miles per month for freight and passenger locomotives. In passenger trains there are more people in a car and more cars in a train. Jobs increase as traffic grows, although not as rapidly, and the output per man hours in ton and passenger miles is greater, especially in the first segment of an expansion. In periods of contraction there is more empty car mileage, fewer tons and passengers in cars, and more labor paid for that is not used. On the other hand, the speed of trains increases more rapidly with contracting than with expanding traffic and there are fewer terminal delays and less wasted time in handling loaded trains upon the road.

Hultgren points out that, as a net result of these variations, every expansion is associated with a corresponding fall in cost per traffic unit and every contraction by a rise. He says: "The data . . . suggest that, under comparable conditions as to morale of labor, quality of fuel and materials, efficiency of management, prices and wage rates paid, a large volume of traffic would always be accompanied by a unit cost lower than that which would accompany a smaller volume of traffic." This, he thinks, is the fundamental reason why railroad profits rise during periods of expanding traffic in spite of some influences which might cause a contrary result. The turning point in costs, he notes, is generally after the high point of a traffic expansion and the low point of a contraction in volume has been reached, although the most rapid increases or decreases occur in earlier periods of the cycle in each case. Profit margins do not, characteristically, shrink while volume is still growing; their behavior does not, therefore, afford an indication of radical changes still to come.

There is much that is interesting in this analysis both for students of cycles and for those who are interested in the railroad industry as such. For the former it provides a vivid picture of the internal changes which occur in an industry under broad cyclical pressure. The statistical material examined is very large, and the correlation of averages of performance in particular aspects of railroad work with the over-all movements of traffic is interesting and plausible. Moreover, the variety of reliable data in the controlled railroad

system is so great that it is possible to attempt interpretations which might be dangerous in other cases. For students of railroading, as such, the study provokes reflections with respect to the operating characteristics of railroad undertakings.

Speaking to the second point but, perhaps in part to the first also, it seems to the reviewer doubtful that Hultgren is right in asserting that a large volume of traffic in railroad operations is always accompanied by a unit cost lower than that which would accompany a smaller volume, even after the documentation which his monograph supplies. If, at a given date, say for the year 1946, traffic units are computed and averages of performance drawn, it will not appear that the lowest costs or most favorable operating results in the United States will be found associated, peculiarly, with rail carriers which enjoy a high density of traffic stated in terms of traffic units per mile of road. This is true, for instance, of operating expense per traffic unit. In 1946, the operating expense of the Pennsylvania Railroad with 7,895,000 traffic units per mile of road was .93 cents per traffic unit, while that of the Illinois Central with 3,648,000 traffic units per mile of road was .74 cents per traffic unit. The conclusion is not drawn from two selected comparisons; a multiplication of instances will show that the correlation is inexact. What is true of operating expenses generally is understandably true of fuel costs per traffic unit, and it is also true of averages such as those of gross ton miles per traffic unit in which no monetary elements appear. In 1946, the number of gross ton miles per traffic unit was 3.1 on the New York Central with a density of 5,317,000 traffic units per mile of road, 2.9 on the Southern with a density of 2,793,000 and 2.4 on the Pere Marquette with a density of 2,397,000. A high rate of gross ton miles to traffic units is, of course, an unfavorable sign.

What the author's figures show is that an *increase* in traffic will lower unit cost and that a *decrease* in traffic will raise it with a given capital equipment or at least with an investment which does not fluctuate with volume. This is the question of full utilization of capacity at any time as distinguished from the question of economy of scale. As a matter of fact there is, naturally, excess capacity at the trough of any cycle in the railroad industry. One would be inclined to expect, also, a general tendency toward excess capacity over longer periods as a result first, of the emergence of other forms of transport and, second, of advances in the rates of pay of railroad workers which may well have reduced the marginal product of a dollar spent in hiring a laborer below the marginal product of a unit of capital devoted to railroad work. The second influence would explain the steady decline in the man hours paid for in maintenance work per 100,000 traffic units between 1921 and December, 1938 which Hultgren reports and here correctly explains. There seems to have been a similar decline in the case of maintenance of equipment, in train and engine employees, and in the category of yardmasters, switch tenders, etc.

One may easily suppose that the characteristic oversupply of railroad facilities, especially since about 1920, the steady pressure for the substitution of machines for men, and the offsetting effects of political and industrial in-

fluence exerted by an organized personnel may have altered the amplitude of fluctuations in railroad traffic and also the behavior of averages of performance in particular cases. It seems an oversimplification to explain changes in cost merely in terms of volume, in view of these facts, and it is particularly hazardous to connect variations in specific performance with volume, to the degree characteristic of this monograph, without reference to other factors which may have entered in. Of course, the author does not think that this is so. Whether he is correct or not will be shown, doubtless, by later studies in the series which will deal with industries which have different characteristics than are associated with railroad operation.

The material in the monograph is well arranged and fully illustrated by graphs and tables. The treatment is objective, and important points are thoroughly discussed. Some attention is given to the transit industry, to highway traffic, and pipe lines and water traffic, although statistics in these areas do not permit elaborate analysis. There is, finally, a chapter on future cycles. The volume deserves attentive study, and will rank as a contribution in its field.

STUART DAGGETT

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Land Economics; Agricultural Economics; Economic Geography

Agricultural Economics. By BENJAMIN HORACE HIBBARD. (New York: McGraw-Hill. 1948. Pp. ix, 441. $5.00.)

The author of this book has given special emphasis to the historical development of the problems in agricultural economics. In so doing, Dr. Hibbard has drawn on his many years of experience in agricultural economics and has shown his keen awareness of the interrelationship of political and economic forces. Most of the major problems usually recognized in an over-all approach to agricultural economics are included. Special emphasis, however, is given to tenancy, to the tariff and its effect on agriculture, and to the development of farm movements and the farm organizations in this country.

It may be classed as a philosophical and historical treatment of the economic problems of agriculture without too much attempt to point to their solutions. It is more of a look backward than a look forward. Statistical data are kept to a minimum except as they are used to paint the historical picture and portray current trends. It is in the analysis of the economic development of agriculture and in pointing out some of the fallacies of our agricultural policies that the author makes his contribution rather than through an analysis of present-day economic problems.

With the exception of the first chapter which concerns itself with the meaning of economics, the first sixteen chapters deal largely with that group of problems which one normally expects to find in an orthodox agricultural economics text, such as farming in a modern society, why so many farms, rural population, size of farm, machinery, factors of production, intensity of cultivation, land values, wages, rent, credit, marketing, and farm

cooperatives. The remaining eighteen chapters of the book are devoted largely to tenancy, tariff, and the development of farm organizations. In the treatment of the problems in the first chapters, the question may be raised in some readers' minds as to whether the developments in agriculture and in agricultural economic research during the past two decades have been given sufficient weight. Both the treatment and references would indicate an undue emphasis on conditions in the earlier periods at the expense of changes and developments in recent years.

A detailed treatment of the tariff and its effect upon agriculture is presented. The author explains why the farmers of the mid-west have been for protection even though it has been against their economic interest. In this section the author has also pointed out desirable future policies. As excellent as the treatment is, the question may well be raised as to whether the tariff has not been over-emphasized as a solution to agriculture's price and income problem. The assumption, that the only way that the United States can trade with the other countries of the world is on a lower price level, might also be challenged. With the national debt at its present level and many other fixed costs at high levels, it might well be argued that adjustments should be made in exchange rates and in other areas rather than reducing prices which would allow us to continue to trade with the rest of the world.

Very little attention is devoted to the economic problems of agriculture arising out of the unstable nature of the domestic economy. Little attention is given to the role of monetary and fiscal policy in stabilizing the general economy and, in turn, the demand for farm products. To the author these may seem of minor importance and simply reflections of the major problems of world trade. He concludes his book with the sentence "What we most need, and eventually must have, is reestablished world trade."

In the chapters dealing with farm movements and the development of various farm organizations, the author demonstrates first-hand knowledge of the political forces causing the development and decline of these various movements and groups. For anyone interested in farm organizations, this section is particularly valuable. It should be read by those interested in agricultural policy as well.

One cannot help close the book with a feeling of pessimism as he views through the author's eyes the recent problems of agriculture and our attempts to solve them. Nor do the author's uncertainties concerning his position and his appraisal of the practical possibilities of a realistic approach in the years ahead encourage one. One misses in the written page the stimulation of Dr. Hibbard's pungent sense of humor when speaking, which always made things seem not quite so gloomy as they really were. But it still reveals his gift for discussing economic subjects intriguingly and in non-technical language. Students of agricultural economics and many others, will find this book a contribution to the economic history of agriculture and agricultural policy.

J. Carroll Bottum

Purdue University

Labor

Government Regulation of Industrial Relations. By GEORGE W. TAYLOR. (New York: Prentice-Hall. 1948. Pp. xii, 383. $4.00.)

American Labor and the Government. By GLENN W. MILLER. (New York: Prentice-Hall. 1948. Pp. xiv, 638. $5.50.)

A revisionist voluntarism permeates Professor Taylor's important book in which, in the course of reviewing industrial relations over the past decade and a half, he sets forth his philosophy of collective bargaining. His is not the voluntarism of the Gospel according to Samuel Gompers who was suspicious alike of private arbitration and government regulation in any form. Taylor does not propose collective bargaining totally unconstrained by interference or the reaching of agreements unimpelled by any outside influence. His acceptance of voluntarily agreed upon compulsion is evidenced by support of voluntary arbitration and "government regulation instituted with the acquiescence of the parties directly affected" (p. 8); and of compelled "voluntary" agreements by acknowledgement of public and governmental pressures which can lead the parties to contracts not based upon full consent, as sometimes happened under the guidance of the National War Labor Board. He inhabits a quarter-way house between collective bargaining based on spontaneous acts of choice and on government regulation.

Professor Taylor has picked a most significant problem: the accommodation of organized labor, large-scale and increasingly organized industry, and government to each other. We have passed from an essentially atomistic and independent society to an increasingly pluralistic and interdependent one. The distribution of effective decision-making power is as perplexing as it is momentous. Taylor favors "better industrial self-government" as against the "worldwide trend toward the amassing of power in central government" (p. ix). "Further steps down the road of government regulation could lead us far away from the basic principles upon which our country is built" (p. 276). He does not take a solitary stand, for his philosophical opposition to government regulation of industrial relations is shared by the National Association of Manufacturers, the Chamber of Commerce, the American Federation of Labor and the Congress of Industrial Organizations. None of these organizations favors such control in principle—but sometimes in practice when used against its adversaries. This distinguishes Professor Taylor who does not favor it, *per se*, at any time. His position may well prove to be the accepted basis for federal policy in the future, despite the public opinion polls which show considerable support for compulsory arbitration, and the high tide of federal intervention in collective bargaining may have past.

The arguments advanced against compulsion are persuasive. Government interference will transfer union-management controversies into the "political arena" where satisfactory solutions will be harder to achieve than around the conference table. The power of government will be unduly augmented, which is an "ample cause for disturbing concern to those who still believe in industrial self-government" (p. 336). Acceptable standards have not yet been developed as a guide for coercive decisions. Enforcement, in a democ-

racy, can become a disturbing complication if powerful private organizations choose not to comply. Compulsion, further, is not popular with the parties potentially subject to it.

The disquieting reality is, however, that "industrial self-government" may not always work. It may turn into collusion. Or the parties may not, as Taylor suggests they do, "set up their own machinery for settling disputes wherever a strike or a lockout entails an undue social cost" (p. 22). Or the wage policies pursued may not conduce to economic stability; or union members may not be given ample opportunity to select and instruct their leaders. Suppose the parties do not show the recommended "increasing regard for the public interest" (p. 13); and suppose also government regulation cannot be instituted with "the acquiescence of the parties directly affected," should "industrial self-government" then be preserved? Professor Taylor hopes the parties will be wise enough to conduct themselves sufficiently circumspectly so that this question may never demand a definitive answer.

This is the orientation from which Taylor approaches his examination of collective bargaining in the United States since the passage of the National Labor Relations Act in 1935. Few men have had such a vantage point from which to view the important developments. He has combined successful arbitration, including experience as the contract umpire between General Motors and the United Automobile Workers, with distinguished public service as chairman of the National War Labor Board and executive secretary of the President's Labor-Management Conference, and in other capacities. Chronological age aside, he is one of the very leading "elder statesmen."

The period covered opened the modern phase of collective bargaining and was one of deepening federal involvement. It afforded the American public, according to Taylor, an opportunity to observe three alternative governmental approaches to collective bargaining. First, the Wagner Act assisted unions to organize and took the parties across the "threshold" into collective bargaining. After that they were to be on their own. Second, the operations of the National War Labor Board illustrated "government policy designed to facilitate and to bring about a meeting of minds of the parties to a dispute" (p. 202). Third, the Taft-Hartley Act, while many of its individual provisions are supported by Taylor, represented "government-managed collective bargaining."

Professor Taylor unequivocally prefers the second. The success of the Railway Labor Act of 1926 and of some of the industrial relations legislation in Sweden does indicate the advantages of governmental regulation based on a degree of prior consent; and it is frequently accepted that this is the best current approach to the problem in the United States generally. Taylor, however, identifies the National War Labor Board rather more with his preferred form of voluntarism than some aspects of the program seem fully to warrant. While the Board had an amazing record of compliance, some minds did not meet under conditions of full freedom and consent. The program, however, is identified as an "inter-weaving of mediation and voluntary arbitration" (p. 161). The no-strike and no-lockout agreement of certain leaders of industry and labor on December 23, 1941, made the agency "a board of volun-

tary arbitration set up under government auspices" (p. 134). And yet, as Taylor points out, these leaders "lacked any formal authority to bind labor and industry generally" (p. 139). Writing about the Lewis, Petrillo and Avery cases, Professor Taylor says, "It would be erroneous to look upon awards in these cases as compulsory arbitration determination. Quite the contrary was the case. They were no more than 'recommendations'" (p. 161). However, when Avery did not like the "recommendations," the federal government did see to their implementation anyway. Rather more credit appears due the emergency powers of the President and the support of public opinion in wartime, as elements of compulsion, than this book gives. Forty plants were seized, and wages were stabilized even when both parties were opposed.

The National War Labor Board did, however, work a miracle in securing consent for its actions and Professor Taylor discusses some of the methods. Tri-partism helped a great deal. Mediation was skillfully undertaken within the Board and between the parties. "Disputants were seldom surprised" (p. 159)—since the Board had a very good system of leaks. "Acceptable decisions" were strenuously sought and customarily found. The contribution of the author of the book to this success story was an indispensable one.

Professor Taylor deeply regrets "the failure of the President's National Labor-Management Conference of 1945 to work out any procedures that could come into play when collective bargaining failed" (p. 204) and thinks this failure "led directly" (p. 207) to the Taft-Hartley Act. In commenting on private arbitration he observes that "mediation in arbitration should not be dismissed as a possibility unless a contrary desire of one of the two parties to the dispute is explicitly expressed" (p. 137), and believes that "mutual acceptability remains as an important attribute of a first-class decision" (p. 158). In many other ways he also shares the conclusions flowing from his rich experience.

"The great industrial relations challenge has been the effectuation of collective bargaining as a constructive social institution" (p. vii). Taylor's essential answer to this challenge is to recommend the full acceptance by the parties of collective bargaining and of each other, good negotiation procedures, mediation and voluntary arbitration. Rather than that government being best which governs least, that government governs best which governs with the consent of organized groups. This may well be the essential lesson for a pluralistic society to learn.

The volume by Miller is of quite a different order. It is a regulation textbook for a non-professional labor law course. It catalogues how far the courts and the government have gone in regulating labor conditions and collective bargaining. While somewhat uninspired, it is a straightforward and clear exposition of the essential facts, and has the great merit of being up to date. It covers the standard subjects including, among many others, the conspiracy doctrine, the antitrust cases, the injunction, workmen's compensation, child labor laws, the National Labor Relations Act, wartime labor controls, and the Fair Labor Standards Act.

The two books, taken together, would make a good combination for an undergraduate course in labor law. The first offers the stimulating opinions of

a seasoned participant, and the latter the carefully documented factual details.

CLARK KERR

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Labor in the American Economy. By WILLIAM S. HOPKINS. (New York: McGraw-Hill. 1948. Pp. xi, 368. $3.50.)

Both the author and the reviewer of textbooks in labor problems are today faced with some difficult questions virtually nonexistent before the war. A decade or more ago the college course in labor was fairly well standardized, consisting in the main of an analysis of "problems," followed by an exposition of the ways in which the parties to industrial relations—industry, labor, and the government—attempted their "solution." Most instructors, judging from the publishers' advertisements, relied on one of the several comprehensive textbooks then available as a principal source of reading material. The author of a labor text therefore knew his market, and, given sufficient skill in writing, analysis, and exposition, could look forward expectantly to a respectable number of "adoptions."

Today, however, both course content and teaching methods are undergoing significant changes. The postwar swelling of the labor relations curriculum, apparent in the establishment of professional schools and institutes, is spilling over into the liberal arts college where more specialized courses are being developed. At the second annual conference on the teaching of labor economics held at Cornell University last summer, the discussions revealed the increasing number of specialized courses being offered in such areas as labor law, social security, collective bargaining, labor legislation, and labor economics. The round table on orientation courses in the labor field revealed little agreement among the participants on the objectives of such a course, its content, materials, or techniques of instruction. So far as any generalization emerged from the sessions, it appeared that the teachers present spent 60 per cent of their time on the area of collective bargaining, with 40 per cent being devoted to a discussion of the labor force and to wage and employment theory. Protective labor legislation and social security were the fields usually omitted because of lack of time or the availability of separate courses.

On the question of teaching methods and materials, the conference indicated even more sharply a definite trend away from the use of general texts in favor of experimentation with field work, discussions, case studies, rôle playing and other "laboratory" methods.

Two questions thus emerged from this sector of the conference: Is the one-semester course in labor problems vanishing, at least to the extent that no one can safely predict its content? And is the textbook tending to become an obsolete tool of instruction? If, as seems likely, a tentative affirmative can be given to both these questions, then the market for single general texts is changing, making it difficult for author and reviewer alike to judge the demand for a new product.

Professor Hopkins's product has several novel characteristics. The author is frankly in revolt against the increasing length and encyclopaedic character of recent texts. Because of his own experience with the futility of asking elementary students to master the vast body of detail now existing, he has sought to write a brief volume using as a unifying theme the problems growing out of the employer-employee relationship. To accomplish this with the necessary economy and brevity, he omits any consistent exposition of economic theory on the ground that this subject has already been covered in the elementary economics course. (The conference last summer, however, exhibited no agreement on the question of whether an economics course should precede a labor course, nor, even when it did, whether the teacher could safely rely on the assumption that the students had acquired a sufficient mastery of principles which could be applied without more training to labor economics). Statistics and other labor facts are also used sparingly by Professor Hopkins since current sources are available to supplement the descriptive material of the text, while the intricacies of labor law and social security legislation are left for more specialized courses.

What remains after these major operations on the body of labor knowledge is divided into three parts. Part I: Labor Problems, is devoted principally to an analysis of types of unemployment, with somewhat briefer treatment of the forces determining wage rates, hours, and working conditions. Part II: Collective Bargaining, includes a description of union and employer organizing tactics, and the bargaining process; an analysis of the typical provisions found in labor agreements; and a discussion of contract administration, including the arbitration of grievances. Part III: Labor, Management and the Public, consists of two brief and wholly inadequate chapters comprising only 17 of the book's total of 302 pages.

This volume invites examination by those who agree that the subject matter of the introductory course should be confined largely to an exposition of the problems of unemployment and collective bargaining. Professor Hopkins writes clearly and entertainingly on these topics, succeeding in his avowed aim to match the lively, informal, and very human nature of his subject matter with a corresponding style and treatment. The bibliographies at the end of each chapter are well selected and should prove helpful for the supplementary assignments which the brevity of this book makes possible.

But while the volume gains in readability from its simplicity of presentation, it also suffers from some obvious defects of oversimplification. In fact, the very smoothness of the exposition may tend to lull the student into a belief that most of the problems mentioned lend themselves to easy "solution." Even the author himself seems at times to lapse into just such a narcotic state as when he asserts, for example, that methods of wage payment furnish "one of the most easily removable sources of conflict in American industry" (p. 127), or when he states that "the many decent employers in the nation are in large part responsible for the appearance of so many decent union leaders" (p. 124). This same tendency to substitute assertion for analysis can be seen in other sections of the book; for example, in the state-

ment (p. 207) that "persuasion by a picket is quite legal provided it is peaceful in the eyes of the court," which overlooks the grave new legal issues posed by the Taft-Hartley Act.

The chapters on labor history and collective bargaining, while in no sense novel in analysis, have the merit of providing for the elementary student some perspective over the territory of labor relations before he begins his journey afoot. But here too the omission of the legal background may well blind the student to the trail. Thus, the treatment of negotiable and non-negotiable issues (pp. 224-25) suggests that when a rival union demands bargaining rights, the union which has been the bargaining agent will refuse to negotiate on the issue of recognition. This may be true, but only partially so, for certainly some hint should be dropped to the student at this point that the National Labor Relations Board may have a voice in determining the question. Similarly when the Act is mentioned in connection with union shop elections (p. 238), the exposition is too brief to give the student any idea as to what the controversy concerning this requirement has been all about. Again, the author makes the assertion that under the 1947 Act, most unions have refused to sign a no-strike clause, a fact which may be true, but for which we have at the moment, to the best of this reviewer's knowledge, no reliable verification. It may also be proper to ask why there is no mention of the growing importance of health and welfare funds as an issue in collective bargaining today.

The chapter on arbitration is one of the most useful in the book, for this is a new field where very little simple expository material has crept into the texts. But here again the author falls into the error of oversimplification when he asserts (p. 276) that a conscious accumulation and following of precedent is desirable in grievance arbitration—certainly a debatable statement—or when he states that at least one level of appeal should be provided for a review of the original arbitrator's award.

These statements of partial truths, together with some careless textual errors such as the references to the Maximum Employment Act and the Board of Economic Advisors when the appendix provides the correct designations, or the inference (p. 153) that the anti-Communist faction has regained control of the Furriers union, suggest that this volume should be used only by an experienced teacher who can make the necessary factual corrections, fill in the gaps in statistics, theory and law, and point out the broader issues involved in labor management relations. But an experienced teacher may not need or desire a textbook, preferring to experiment with the wider range of techniques and materials now coming into use. We revert, therefore, to the questions posed at the beginning of this review as well as to that raised by Professor Hopkins in his preface. Perhaps the way to meet the expansion of knowledge in the labor relations field lies not in tearing away the flesh to expose the skeleton but in a greater articulation of the curriculum. For knowledge in this field is rapidly becoming too extensive to be confined either to a single text or a single course.

JEAN TREPP MCKELVEY

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The New Men of Power—America's Labor Leaders. By C. WRIGHT MILLS. (New York: Harcourt, Brace. 1948. Pp. 323. $3.50.)

As Professor Mills sees it, the "main drift" in the United States is "towards war and slump." The only organizations that can stop this drift are the trade unions (p. 3). But labor-business cooperation, he believes, is not the route to peace and prosperity; it is a "trap set by the sophisticated conservative" into which the "labor leader is walking backwards" and thus helping to move the United States "into a corporate form of garrison state" (p. 233). These conclusions have international implications, for Professor Mills also believes that "What the U. S. does, or fails to do, may be the key to what will happen in the world. What the labor leader does, or fails to do, may be the key to what will happen in the U. S." (p. 3). Otherwise stated, the labor leaders "are now the strategic elite in American society." Our prospects are indeed dim, however, if it is correct to characterize these leaders and the general situation by writing that "Never has so much depended upon men who are so ill-prepared and so little inclined to assume the responsibility" (p. 291).

The characterization of the labor leaders, correct or no, rests upon a set of facts and generalizations that are in themselves highly interesting and thought-provoking. (Some readers will find certain items only provoking.) For example, there are data on a large sample of A.F. of L. and C.I.O. leaders concerning their ages, formal education, nativity, occupations of fathers, "image of business," incomes, and their attitudes toward the old political parties and the desirability and prospects of a new party.

Among the generalizations, the following are particularly worthy of note. Radio newscasts, radio comments, and newspapers are "not kind" to organized labor and its leaders. The "general rule" is to "ignore the peaceful and stable features" of union activities and emphasize in detail the strikes, deadlocks, and violence (p. 32). More than half the questions put by the polling organizations to the public about organized labor in the period 1940-45 were biased against unions (p. 298). Labor leader racketeers, in using the power of unions to improve their business positions, "have merely adapted themselves to the prevailing circumstances and practices of American economic life" (p. 123).

Professor Mill's conclusion that labor leaders are ill-prepared and disinclined to use their position as the strategic elite to try to stop the main drift rests in large part upon the results of the application of four tests of "militancy." To be "adequate" to the prevailing situation those leaders must: (1) "see the immense power and influence of business and its associations on national affairs"; (2) "recognize the intent of business to break or shackle labor unions"; (3) "see that the two dominant parties are blind traps"; and (4) favor "a labor party, at least within the next ten years." The author continues: "According to these standards, which are not very rigorous or trustworthy, 8 per cent of the C.I.O. and 4 per cent of the A.F. of L. leaders qualify" (pp. 288-89). His conclusion rests, for another part, upon examples designed to show that in the name of union-management cooperation labor

leaders have at times "lined up with the vested interests of [an] industry against the general business community, not to mention the public." Such developments could (at times he seems to mean would more or less inevitably) lead to nationwide cooperation under state control; that is, to a corporate state (pp. 228-29, 121, 132, 154).

Although, as noted, Professor Mills considers the unions "the only organizations capable of stopping the main drift," it is abundantly clear that he believes their leaders and members must develop more political awareness and become the core of a new party. It is, therefore, at least disconcerting to discover (pp. 274-81) that the other constituents of this party would be almost identical with those previously proposed by some labor leaders. Those proposals had been contemptuously dismissed as collaboration "with the practical right to form another party just like those already existing" (p. 214). Furthermore, the author would have been well advised to use less sweeping language in his contention that in "all countries" the "intellectual . . . has succeeded only in rare instances and for short periods of time" in "raising the level of political awareness" among workers (p. 281). Nor does Professor Mills indicate appreciation of the difficulties involved in encouraging consumer cooperatives and at the same time organizing as a part of the "left" the small-business men. Austrian experience is pertinent to the last two comments. Again, it is scarcely consistent to write that "The New Deal destroyed any reason-for-being of a national third party" (p. 181) and to argue for one at considerable length. The claim that the effect of the New Deal was "to destroy the chances over a long time for independent political action by labor" (p. 184) may have been intended as a qualification of the flat "destroyed" of the earlier sentence. If so, the reader wonders whether the author failed to take into account his own generalizations that under conditions of slump "the size and significance of the political publics may undergo great change with bewildering swiftness" (p. 28) and that a slump is inevitable (pp. 30, 238, 243, *et al.*). Finally, in this little catalog, it is simply untrue that "intellectuals . . . have consistently supported independent political parties" (p. 217).

None of the foregoing is intended to deny that Professor Mills has written an outstanding, stimulating and highly useful book. It remains regrettable that certain inconsistencies and discrepancies leave the reader in doubt about the thoroughness with which the author thought through a few of his major problems and proposals.

CHARLES A. GULICK

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Collective Bargaining: Principles and Cases. By JOHN T. DUNLOP. (Chicago: Richard D. Irwin. 1949. Pp. xvi, 433. $4.00.)

This book is designed for classroom use at an elementary level. It has grown out of the teaching of the course called "Trade Unionism and Collective Bargaining," which, at Harvard, is a one-semester introduction to Labor Economics. The book is divided into two parts: a section comprising a discus-

sion of the elements pertinent to an understanding of collective bargaining, including chapters on the emergence of collective bargaining, a national policy, union-management organization, the labor agreement, and standards for wage determination; and a section comprising a collection of cases arranged by issues, covering discharge and discipline, status of union and management representatives, union security, employment rights, work schedules, vacations, and wages.

While the introductory discussion is good, the chief merit of the book is the presentation of cases. Although not intended to cover all issues, the selection of cases is balanced and the book should prove useful as a supplement to the traditional type of text in the general Labor Problems or Labor Economics course, or it should prove useful as a text in a course introductory to the study of collective bargaining.

The merit of Dunlop's presentation of cases, as distinguished from that in the typical case book, is the statement of the issue and the positions of the parties without giving answers; only occasionally is the decision of the arbitrator included. It is wisely recognized that there is no "correct" answer and Dunlop has included a series of questions following each case which may prove useful in pointing up discussion of relevant elements in the issues at hand. The limitation of the presentation is the inability in a small book to make the whole step toward building complete case situations. An issue in collective bargaining or under an agreement is nearly always inextricably tied in with a total relationship. One needs to know the nature of this relationship, including the whole contract, the company and union structures, the personalities, the industry and the community. These things, of course, cannot be put into a text or case book. The teacher will be well advised to find some local cases about which it will be possible for the student to acquire a familiarity with the total situation so that the realities and complexities of the issues studied can be observed.

If the presentation of background and factual materials is a little on the skimpy side, nevertheless, Dunlop's cases will provide a basis for wholesome discussion of the common issues in collective bargaining. The good instructor must always enrich his course by making it as realistic as possible with his own materials.

VERNON H. JENSEN

Cornell University

Job Horizons. By LLOYD G. REYNOLDS and JOSEPH SHISTER. (New York: Harper & Bros. 1949. Pp. x, 102. $2.25.)

The Labor and Management Center at Yale University recently completed a two-year study of the labor market in a "medium-sized New England manufacturing center." Attention was focussed on labor mobility, wage structure, employer personnel practices, and worker attitudes. Interviews were conducted with workers, management officials, and union leaders, and extensive statistical data were collected. *Job Horizons* is a preliminary report summarizing the Center's findings on one phase of the project. The labor market

in this primarily non-union community is viewed through the eyes of the manual workers themselves. The report describes the circumstances under which they enter the labor market in the first instance; how they go about finding jobs; what they like and dislike about their work; what they do when dissatisfied with their present jobs; and what conception they have of economic opportunity.

The picture which emerges is highly instructive. Typically the manual worker first enters the labor market because of a financial crisis in his family or because he is anxious to leave school and be "out on his own." In either case, he is in a mood to welcome almost any job and is not likely to make comparisons of alternative opportunities. There are additional reasons why he is inclined to accept the first job he finds. He feels that jobs are scarce and valuable; he often lacks any definite conception of what he is looking for; and he is strongly influenced by the suggestions of his parents. Formal procedures for obtaining jobs, such as the use of the State Employment Service, are not so important as "tips" from relatives and friends or random application at nearby plants. When the worker decides that he wishes to make a change, he does not immediately quit, nor does he set out systematically to find a more desirable job. Instead, he merely becomes more receptive to rumors of openings and offers. If nothing turns up, he eventually quits and re-enters the labor market. Again he makes use of informal and "political" job-hunting techniques, and again he is likely to accept the first offer received. His knowledge of labor-market conditions is sketchy and inaccurate throughout.

Clearly, these findings do not square with the ideal theory of the labor market, but Reynolds and Shister do not regard this as any sign of "irrational" behavior. "The worker's behavior must be understood as a response to the situation in which *the worker* believes he is placed," they point out, "not to the situation as it might be conceived by an omniscient and scientifically-trained observer. . . . Worker behavior is in general a rational adaptation to the circumstances *as the worker sees them.*"

The section on "Factors in Job Satisfaction" is rather superficial, and the statistical analysis of "Movement up the Occupational Ladder" is inconclusive for the reason that only workers currently performing manual labor were interviewed. On the other hand, "The Worker's View of Job Opportunity" is described with feeling and insight. As the worker grows older, wiser, and sadder, he "learns to set bounds to his occupational ambitions. If in his early years he has any illusions about a rapid rise to independence and wealth, these hopes soon wither before the realities of industrial employment. He learns to limit his aspirations to modest and attainable objectives: a change from the second shift to the first shift, from hourly rated work to incentive work, from a job in labor grade 9 to a job in labor grade 8, or even to another job in the same labor grade which is more desirable for one reason or another. Beyond this most workers have little expectation of going."

Arthur M. Ross

University of California, Berkeley

Beyond Collective Bargaining. By ALEXANDER R. HERON. (Stanford: Stanford University Press. 1948. Pp. vii, 214. $2.75.)

It is customary for most "practical men" involved in collective bargaining —on both sides of the fence—to cast labor problems within the restricted contours of their immediate environment. Here and there, however, we find a "practitioner" whose vision encompasses far broader areas. Certainly Mr. Heron must be counted among these select few.

A managerial representative, the author nevertheless sees collective bargaining issues in their total social perspective. Within this framework he discusses a variety of diversified topics: the scope of collective bargaining, managerial prerogatives, the rôle of government in labor-management relations, the unionization of foremen, and so on. While the book lacks a unifying substantive theme (unless it be the rather vague theme of "labor in general"), the approach is undeniably "objective" throughout. Which is precisely why the author succeeds in getting at the roots of each issue. And the analysis is expressed in language which avoids the sophisticated jargon of the researcher.

Mr. Heron's ideas, distilled from a welter of experience with the hard facts of reality, deserve careful study by the academicians. He provides some highly constructive leads which the professionals could explore with profit for purposes of refinement. The author's treatment of the "managerial prerogatives" issue is particularly noteworthy in this respect.

While the academic people will find the book a useful source of research leads, the other members of the industrial relations fraternity will encounter "workable solutions" for problems with which they frequently have to grapple.

JOSEPH SHISTER

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Labour-Management Co-operation in United States War Production. Studies and Reports, New Series No. 6. (Montreal: International Labour Office. 1948. Pp. vi, 405. $2.25.)

This study is an account of the organizational arrangements through which the United States government enlisted the counsel and cooperation of management and labor for the war effort of industry. It was prepared at the suggestion of the chairman of the War Manpower Commission to supplement a similar report which the ILO had published during the war on British Joint Production Machinery (Studies and Reports, Series A, No. 43).

The study is based throughout on primary material (laws, executive and administrative orders, manuals and field instructions, reports of the respective agencies, official and private files, interviews, and personal observations). At the time it was made, source material in digested form was hardly available. Since then—in fact, before the study was published—governmental accounts of the wartime industrial effort have begun to appear and are continuing to do so, covering the vast subject in all its phases with great completeness. Foremost among them was Industrial Mobilization for War: His-

tory of the War Production Board and Predecessor Agencies 1940-1945, issued by the Bureau of Demobilization; Vol. I, Program and Administration, 1,000 pages appeared in print; Vol. II, Materials and Production, 2,500 pages, in typescript. In addition, over forty special studies in a series, "Historical Reports on War Administration," have appeared, each treating of a particular industry or a particular problem. (Nos. 23 and 32 deal with Labor Policy; and Nos. 24 and 34 with Industry and Labor Advisory Committees.) Nevertheless, the ILO study will remain very valuable as a first-hand, comprehensive, and not too voluminous account of a specially significant side of the story.

After a brief historical background, in which the succession of Boards and Commissions during the several phases of the war is reviewed, the subject is treated chiefly in two parts: Labour-Management Consultation in Voluntary Manpower Mobilization, and Labour-Management Participation in War Production Planning. The first of these devotes separate chapters to the organization on the national, regional, state, and area level, and in particular to the appeal machinery from the lowest to the highest level "permitting both employers and workers to appeal from any apparent injustices in the application of the programme" (p. 129). In the part on war production, maximum space is given to the government-promoted but voluntary plant committees operated in various degrees of "jointness" by management and labor representatives to improve production methods, reduce waste, combat absenteeism, and build up morale in general. Another part treats more briefly of the rôle of management and labor in "other governmental agencies," notably the War Labor Board which is discussed as the only instance of a tri-partite board with pc'icy-making rather than merely advisory functions. A concluding chapter (reprinted from the *International Labour Review*, October 1945) compares wartime labor-management consultation in the United States and Great Britain. Among other matters, it notes some interesting differences deriving from the more securely established trade unionism in Britain which permitted the use of the regular collective bargaining machinery for the joint solution of manpower and production problems.

This insecurity in the United States of established relations between management and labor runs implicitly through much of this account of "labor-management cooperation," in the form of an ever-present mutual suspicion that the other side might use the emergency arrangements to further its own ends: management anxious that the unions might expect to be consulted about production problems in the reconversion period, or even in peacetime, and the unions jealously guarding against plant committees developing into "company unions" encroaching on their collective bargaining sphere. These committees must, however, often have answered a real need; for, according to a survey of 3,200 wartime labor-management committees, several hundred were found to have continued and were successfully functioning as a part of peacetime plant operation (36th Annual Report of the Secretary of Labor, 1948, p. 61).

The book makes somewhat heavy reading. The dryness inherent in the

subject is hardly diminished by omission of all names of either persons or even particular industries in contrast to the above-mentioned governmental accounts which abound in lively personalities and incidents. Yet, in the end all this matter of fact detail on boards, committees and commissions forming and dissolving and reorganizing, and their often humble and often futile day-to-day work, adds up to the tremendous thing which it was: democracy with its trial-and-error methods, departing as little as possible from its ideal of voluntarism, successfully bending the multi-limbed, multi-headed body of the free-enterprise system to the single-souled war effort of the nation.

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Industrial Relations in New Zealand. By A. E. C. HARE. (Wellington: Whitcombe and Tombs, Ltd. 1946. Pp. 375. 10*s*., 6*d*.)

For almost a half-century now, significant experiments in the field of compulsory industrial arbitration have been quietly under way in Australia and New Zealand. In the latter country a separate Department of Labour was established as early as 1898 when only few countries of the world had recognized the need of establishing separate departments to legislate and control with respect to the social problems of industry. Shortly thereafter New Zealand passed the Labour Disputes Investigation Act (1913), and together with the Industrial Conciliation and Arbitration Act of 1925, this legislation still stands as the central instrument for determining wages and settling labor disputes throughout the islands.

Anderson and Foenander have heretofore published basic analyses of the industrial arbitration systems of Australia, but Professor Hare's work constitutes the first comprehensive study yet made of the New Zealand system. For this accomplishment, he deserves considerable credit.

The study is presented in three parts. Part I suggests the general problem of industrial unrest in New Zealand by examining the causes of industrial unrest, and suggesting certain remedies. Chief causes of unrest are found to be discontent arising from work, wages, and ignorance of the worker's role and of his employer's problems. In overcoming—or at least in lessening—these discontents, both the state and the management are found to play important roles.

Part II presents a description of industrial organization in New Zealand. This is introduced by a brief picture of the development of industry and population followed by a digest of laws relating to wages, hours, factory conditions, trade unions, employer organizations, methods of settling industrial disputes, and strikes.

In Part III, the author suggests the nature and extent of proposed changes of law and practice within the field of industrial relations which he believes are designed to overcome many of the shortcomings of present regulations and practice. Among these are recommended a new Factories Act with more specific requirements and wider scope than the present law provides, better training for management foremen, executives, and personnel offi-

cers, a stabilization of employment by reduction of seasonal unemployment and the application of the merit-rating principle to Social Security taxes, better methods of distributing the proceeds of industry through profit-sharing and other such schemes, and certain changes in the organizations of both employers and unions.

The author finds no serious difficulties involved in the operation of the Industrial Conciliation and Arbitration Act, but in the interest of promoting its influence and effectiveness he suggests that changes should be made so as to "encourage the development of negotiations outside the formalities laid down" (by the Act), and to "devise means for bringing about active consultation on common interests" (p. 323).

A helpful Technical Appendix on the distribution of personal income concludes the presentation. Colin Clark has done original and basic work on the subject of income distribution in Australia, but heretofore very little of significance has appeared on this subject in New Zealand where average real incomes are probably higher than they are anywhere else in the world.

My chief criticism of this work, aside from errors (*cf.* p. 105, p. 152) and questions concerning statements of fact and conclusion (*cf.* p. 79, 81-82, 96, 198) lies with respect to what the study might have done rather than what is done. There is very little analysis to be found in the work, for the study is descriptive only. This seems to be a serious shortcoming, since other nations look upon the New Zealand experiment with considerable interest in the hope of finding a sensible democratic answer not only to the problem of strikes but also to the basic question of what is the relationship between wages and prices in a country where the workers' earnings are set by a court of arbitration.

It is to be hoped that some scholar will continue the analysis for which Professor Hare has laid a good foundation in order that more light may be thrown upon this question of the trend of real earnings under compulsory arbitration, even in a small country like New Zealand.

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NOTES

SIXTY-SECOND ANNUAL MEETING OF THE AMERICAN ECONOMIC ASSOCIATION

Commodore Hotel, New York City, December 27-30, 1949

Preliminary Announcement of the Program

The central theme of most of the sessions of the 1949 program is "A Stocktaking of American Capitalism." Most of the characteristics of the current international scene and not a few of the salient features of our domestic situation arise from the international struggle for power and, underlying this struggle, the pervasive contest of opposing ideologies. Economists are concerned with both of these trials of strength, but with the latter more directly. For economists in America, it would seem to be both their patriotic duty and their obligation as social scientists to make a concerted attempt to appraise the operation of our capitalist or private enterprise system. This theme recommended itself for the present meetings of the Association not only because of its overriding importance, but also because judicious assessment requires the contributions of the manifold fields embraced within the broad discipline of economics.

Not all of these fields are represented in the present program; indeed, it would probably be bootless to attempt a really exhaustive presentation. On the other hand, completely to exclude certain timely areas of discussion because they were not directly oriented to the main theme would also be unwise. Sessions closely oriented to the Stocktaking of American Capitalism begin with the evening meeting on Tuesday and extend through the general appraisal scheduled for Friday morning. Sessions less closely gauged to the central theme occupy the afternoon preceding and following these limits. One session has been scheduled for each of the three evenings and for the last day, morning and afternoon; otherwise, three sessions will take place each morning and afternoon. In all, there are twenty sessions, with several additional breakfast and luncheon meetings.

The Executive Committee of the American Economic Association will meet at 9 A.M. on Tuesday, December 27, and remain in session throughout the forenoon and the luncheon hour. The meeting of the new Executive Committee, which retiring members of the old committee are invited to attend, will begin with luncheon at 12:30 P.M. on Friday, December 30, and continue in the afternoon as long as necessary.

Tuesday, December 27

2:00 P.M. PROBLEMS OF AN ADVANCED DEFENSE ECONOMY

Chairman: DONALD H. WALLACE, Princeton University

Papers: Production for Defense
CHARLES J. HITCH, The Rand Corporation
Price Controls and Rationing
Circumstances Requiring Price Controls and Rationing
BERNARD F. HALEY, Stanford University
Monetary and Fiscal Aspects
RICHARD A. MUSGRAVE, University of Michigan
Labor Problems
LLOYD G. REYNOLDS, Yale University

Discussion: WILLIAM HABER, University of Michigan
HERBERT STEIN, Committee for Economic Development

ECONOMIC POLICY IN OCCUPIED GERMANY

Chairman: CALVIN B. HOOVER, Duke University

Papers: The Effect of Trade and Industrial Efficiency upon German Agriculture
THEODORE W. SCHULTZ, University of Chicago

The Role of Fiscal-Monetary Policy in German Economic Recovery
WALTER W. HELLER, University of Minnesota
Fitting Germany into Western European and World Trade
HORST MENDERSHAUSEN, Federal Reserve Bank of New York

Discussion: GERHARD COLM, Council of Economic Advisers
LLOYD A. METZLER, University of Chicago
PHILIP M. RAUP, University of Wisconsin

4:00 P.M. POPULATION AND RESOURCES: Joint session with the American Statistical Association

Chairman: ALVA MYRDAL, Social Affairs Department, United Nations

Papers: World's Population at the End of the 20th Century
FRANK NOTESTEIN, Princeton University
World's Food and Agricultural Potential
P. V. CARDON, U. S. Department of Agriculture

Discussion: JOSEPH S. DAVIS, Stanford University
D. GALE JOHNSON, University of Chicago

8:00 P.M. WHAT PLANNING AND HOW MUCH IS COMPATIBLE WITH A MARKET ECONOMY? RECENT EUROPEAN EXPERIENCE

Chairman: SENATOR PAUL H. DOUGLAS, Washington, D.C.

Addresses: SIR HENRY CLAY, Oxford University
ERIK LINDAHL, University of Uppsala

Discussion: Informal discussion from the floor

Wednesday, December 28

10:00 A.M. U.S. FOREIGN INVESTMENT IN UNDER-DEVELOPED AREAS

Chairman: JAMES W. ANGELL, Columbia University

Papers: The Distribution of Gains between Investing and Borrowing Countries
H. W. SINGER, Department of Economic Affairs, United Nations
Tax, Treaty, Guaranty and Other Methods of Encouraging Private U.S. Foreign Investment
WILLIAM A. BROWN, JR., Brookings Institution
Impact of U.S. Foreign Investments on our own Economy
WALTER S. SALANT, Council of Economic Advisers

Discussion: LEROY D. STINEBOWER, Department of State
B. K. MADAN, International Monetary Fund
BRUNO FOA, New York

STABILIZING THE ECONOMY: THE EMPLOYMENT ACT OF 1946 IN OPERATION

Chairman: E. A. GOLDENWEISER, Institute for Advanced Study

Papers: The Council of Economic Advisers: Political Economy on Trial
PAUL J. STRAYER, Princeton University
Economic Requisites for Achieving Economic Stability
GEORGE LELAND BACH, Carnegie Institute of Technology
Political and Administrative Requisites for Achieving Economic Stability
ROY BLOUGH, University of Chicago

Discussion: BEARDSLEY RUML, Jewelry Research Foundation
ARTHUR SMITHIES, Harvard University
Another, to be announced

CAPITALISM AND MONOPOLISTIC COMPETITION: I. THE THEORY OF OLIGOPOLY

Chairman: MORRIS A. COPELAND, Cornell University

Papers: Oligopoly by Merger
GEORGE J. STIGLER, Columbia University
Technological Economies of Size *versus* "Artificial Exclusion" as Sources of Oligopoly Power
JOE S. BAIN, University of California, Berkeley
Sales Techniques and Ignorance as Sources of Oligopoly Power
TIBOR SCITOVSZKY, Stanford University
Collusion and its Limits under Oligopoly
WILLIAM FELLNER, University of California, Berkeley

Discussion: The authors of these papers and members of the Association

12:00 M. THE UNITED STATES AND FOREIGN INVESTMENT: Joint session with the American Finance Association

Chairmen: NEIL JACOBY, University of California, Los Angeles
HOWARD S. ELLIS, University of California, Berkeley

2:00 P.M. CAPITALISM AND MONOPOLISTIC COMPETITION: II. CAN THE AMERICAN ECONOMY BE MADE MORE COMPETITIVE?

Chairman: CORWIN D. EDWARDS, Federal Trade Commission

Papers: The Significance of Oligopoly in the American Economy
CLAIR WILCOX, Swarthmore College
The Influence of Size of Firms on the Functioning of the Economy
A. D. H. KAPLAN, Brookings Institution
Production Heterogeneity and Public Policy
E. H. CHAMBERLIN, Harvard University
The Orientation of Anti-Trust Policy
J. M. CLARK, Columbia University

Discussion: The authors of these papers and members of the Association

TRANSPORTATION IN CAPITALIST AND SOCIALIZED ECONOMIES

Chairman: SIDNEY L. MILLER, University of Pennsylvania

Papers: An Appraisal of Nationalized Transport in Great Britain
G. LLOYD WILSON, University of Pennsylvania
E. GROSVENOR PLOWMAN, Vice President, United States Steel Corporation
The Reorganization of Transport Regulation in the United States
CHARLES DEARING, Brookings Institution

Discussion: VIRGIL D. COVER, Syracuse University
T. W. VAN METRE, Columbia University
H. W. TORGERSON, Northwestern University
I. L. SHARFMAN, University of Michigan
H. K. SNELL, University of Texas

4:00 P.M. PRIVATE ENTERPRISE AND INEQUALITY OF INCOME: Joint session with the American Statistical Association

Chairman: HILDEGARDE KNEELAND, Bureau of the Budget

Papers: Statistical Information on the Distribution of Income by Size
SELMA GOLDSMITH, U.S. Department of Commerce
Income Distribution as a Measure of Economic Welfare
HAZEL KYRK, University of Chicago

Evaluation of Alternative Techniques for Promoting Equality in a Capitalist Society
A. G. B. Fisher, International Monetary Fund

Discussion: To be announced

8:00 P.M. PRESIDENTIAL ADDRESSES: Joint session with the American Statistical Association

Thursday, December 29

8:30 A.M. PROBLEMS OF TEACHING AND RESEARCH IN LATIN AMERICAN ECONOMIES (Breakfast Session)

Chairman: To be announced

(For suggestions and enquiries, address Richard F. Behrendt, Colgate University, Hamilton, N.Y.)

10:00 A.M. TAX STRUCTURE AND PRIVATE ENTERPRISE

Chairman: To be announced

Papers: Capital Gains and Losses
Lawrence H. Seltzer, Wayne University
How Should Wealth Transfers be Taxed?
E. Gordon Keith, University of Pennsylvania
Efficiency vs. Equity Issues in Federal Tax Policy
Earl R. Rolph, University of California, Berkeley

Discussion: O. H. Brownlee, University of Chicago
Louis Shere, University of Indiana
Richard E. Slitor, U. S. Treasury

CAPITALISM AND ECONOMIC PROGRESS: Joint session with the Economic History Association

Chairman: Louis M. Hacker, Columbia University

Papers: Appraisal of American Economic Progress
Harold F. Williamson, Northwestern University
Innovation in American Progress
George W. Terborgh, Machinery and Allied Products Institute
Capital Accumulation and Progress
Edgar M. Hoover, Council of Economic Advisers

Discussion: Yale Brozen, Northwestern University
David Mc. Wright, University of Virginia

CAPITALISM, ECONOMIC STABILITY, AND PRIMARY PRODUCERS: Joint session with the American Farm Economic Association

Chairman: Theodore W. Schultz, University of Chicago

Papers: The Effects of Economic Instability on Primary Producers
Geoffrey Moore, National Bureau of Economic Research
The Case for Supplementary Measures Dealing Directly with Income and Price Instability that Confront Primary Producers
D. Gale Johnson, University of Chicago
Another paper to be announced

Discussion: Fred V. Waugh, Council of Economic Advisers
Others to be announced

2:00 P.M. LINEAR MODELS OF PRODUCTION AND ALLOCATION: Joint session with the Econometric Society

Chairman: Solomon Fabricant, National Bureau of Economic Research

Papers: An Evaluation of the Inter-Industry Relations Approach and its Generalizations
N. Georgescu-Roegen, Vanderbilt University
Efficient Allocation of Resources
T. C. Koopmans, Cowles Commission

Discussion: George J. Stigler, Columbia University
Others to be announced

CAN CAPITALISM DISPENSE WITH FREE LABOR MARKETS?: Joint session with the Industrial Relations Research Association

Chairman: David A. McCabe, Princeton University

Papers: Character and Consequences of Institutional Controls of Labor Markets
Clark Kerr, University of California
The Implications of Collective Bargaining for Prices and Profits
Joseph Shister, University of Buffalo
Another paper to be announced

Discussion: Paul Fisher, Dartmouth College
Charles C. Killingsworth, Michigan State College
Frank C. Pierson, Swarthmore College

4:00 P.M. CAPITALISM AND ECONOMIC STABILITY: DIRECT VS. MONETARY FISCAL CONTROLS: Joint session with the American Finance Association

5:00 P.M. ANNUAL BUSINESS MEETING, including award of the John Bates Clark Medal

8:00 P.M. ECONOMIC POWER BLOCS AND AMERICAN CAPITALISM: Joint session with the American Political Science Association, the American Sociological Society, and the Industrial Relations Research Association

Chairman: J. Douglas Brown, Princeton University

Papers: Interest Blocs and Social Control
Herbert Blumer, Department of Sociology, University of Chicago
Title to be announced
Merle Fainsod, Department of Government, Harvard University
Power Blocs and the Formation and Content of Economic Decisions
Joseph J. Spengler, Department of Economics, Duke University

Discussion: Don Price, Public Administration Clearing House
Hans Speier, Rand Corporation
Neil W. Chamberlain, Yale University

Friday, December 30

10:00 A.M. AMERICAN CAPITALISM: WHERE ARE WE GOING?

Chairman: Frank H. Knight, University of Chicago

Papers: Title to be announced
B. S. Kierstead, McGill University

Title to be announced
JOSEPH SCHUMPETER, Harvard University
Some Basic Economic Trends
SUMNER H. SLICHTER, Harvard University
Discussion: There will be no prepared comments, but discussion from the floor will be invited.

2:00 P.M. ROUND TABLE ON THE TEACHING OF ELEMENTARY ECONOMICS
Chairman: HORACE TAYLOR, Columbia University
Papers: The National Income Approach
Author to be announced
An Alternative Approach: the Interdepartmental Introductory Course
Author to be announced

At a time subsequently to be announced, the group interested in Public Utilities will meet informally to hear and discuss the following papers:

Some Economic Objectives of Public Utility Regulation
C. EMERY TROXEL, Wayne University
Federal Regulation of the Natural Gas Industry
BURTON N. BEHLING, National Security Resources Board

Necrology

Charles A. Hales, June 19, 1949.
Charles R. Metzger, May 23, 1949.
Edward Carroll Sibley, January 6, 1949.

Appointments and Resignations

Lewis W. Adams has been promoted to professor of economics and dean of the School of Commerce and Administration at Washington and Lee University.

Kenneth J. Arrow, formerly of the University of Chicago, has been appointed acting assistant professor of economics at Stanford University.

Robert D. Ayars has been granted a leave of absence from the School of Business Administration, University of Pittsburgh, for the coming academic year.

Henry G. Baker, formerly director of the Bureau of Business Research, Oklahoma City University, is now associate professor of marketing at the University of Georgia.

Paul A. Baran, formerly of the Federal Reserve Bank of New York, has been appointed associate professor of economics at Stanford University.

William J. Baumol has been appointed assistant professor of economics at Princeton University.

Jack N. Behrman has been appointed instructor in economics at Princeton University.

Walter J. Beidatsch, formerly chief economist of the Federal Power Commission, has been appointed professor of transportation economics and public utilities at the Alabama Polytechnic Institute.

David C. Belcher has joined the staff of the College of Commerce and Business Administration, University of Illinois, as assistant professor.

Maurice C. Benewitz, of Brown University, has been appointed instructor in economics at the University of Minnesota.

Claude L. Benner has been elected president of the Continental American Life Insurance Company.

Edward G. Bennion, head of the Economics Division of Standard Oil Company of New Jersey, has been appointed lecturer in economics in the Graduate School of Business, Columbia University.

Homer A. Black has been promoted to the rank of assistant professor in the College of Business Administration, University of Georgia.

Theodore H. Boggs, emeritus professor of economics at Stanford University, has retired from his post as visititing professor of economics at the University of Washington.

E. R. Bollinger has resigned from Emory University to accept an appointment as associate professor in the Industrial Management Division, Georgia School of Technology.

James C. Bonbright has been given leave from the Graduate School of Business, Columbia University, for the current academic year to conduct a study under the auspices of the Columbia University Council for Research in the Social Sciences.

Harold Borgen has been appointed instructor in economics in the College of Business Administration, University of Nebraska.

Arthur J. Brown, of the University of Leeds, has been appointed visiting professor in the European Institute, Columbia University, for the Spring session, 1950.

Horace B. Brown, Jr., dean of the University of Mississippi School of Commerce and Business Administration, has been appointed dean of the University of Oklahoma College of Business Administration.

Joe E. Brown, formerly instructor in economics at the University of Texas, has been appointed associate professor of economics, University of Oklahoma.

Yale Brozen has been granted a leave of absence from Northwestern University to pursue a special study and survey.

Leslie J. Buchan, dean of the College of Commerce and Business Administration at Tulane University, has been appointed dean of the School of Business and Public Administration, Washington University, St. Louis.

Henry T. Buechel has been promoted to associate professor of economics at the University of Washington.

J. V. Burkhead has been promoted to the rank of associate professor in the department of economics, Syracuse University.

Arthur F. Burns, of Columbia University, has been granted leave of absence for the academic year 1949-50 for research on business cycles.

William R. Busch has joined the faculty of the University of Minnesota as instructor in economics.

Arthur P. Butler has joined the staff of the department of economics, University of Buffalo.

George J. Cady, of Northwestern University, has accepted a professorship at Redlands University.

Lloyd Callow has been appointed instructor in accounting at the University of Chicago.

Alfred E. Chalk, who has held a teaching fellowship in economics at the University of Texas for two years, has returned to his position as associate professor of economics at Texas A. & M. College.

I-Nien Chien has joined the faculty of the University of Minnesota as instructor in economics.

J. M. Clark, of Columbia University, was awarded the degree of Doctor of Laws by the New School for Social Research in May, 1949.

Clay L. Cochran has been promoted to assistant professor of economics at the University of Oklahoma.

Almand R. Coleman has been promoted to chairman of the department of accounting at Washington and Lee University.

Joseph W. Conard has been appointed assistant professor of economics at Swarthmore College effective in the fall of 1950.

John R. Craf has been appointed professor of economics and head of the department of economics-commerce at the University of Louisville.

Daniel Creamer, of the National Bureau of Economic Research, is engaged in a research project under the joint auspices of the Social Science Research Center of the University of Puerto Rico, the Puerto Rico Industrial Development Company, and the Office of Statistics of the Puerto Rico Bureau of the Budget.

James Crutchfield, of the University of California, has been appointed acting assistant professor of economics at the University of Washington.

Leon A. Dale has been appointed assistant professor of economics at the University of Florida.

Clyde E. Dankert has been appointed chairman of the department of economics at Dartmouth College.

A. J. Danks, of New Zealand, is visiting lecturer in economics at the University of Washington in the fall term.

Paul G. Darling, of Rutgers University, is now assistant professor of economics at Carnegie Institute of Technology.

Joel P. Dean has been granted leave from Columbia University during the current academic year to conduct research for the Committee for Economic Development.

Merrill De Voe, of the University of Kentucky, has been appointed visiting associate professor at the Universty of Southern California.

Jurgen Dich, councilor to the Ministries of Housing, Social Affairs, and Labor in Denmark and a member of the Danish delegation to the Economic and Social Council of the United Nations, is a visiting professor at the University of Wisconsin during the current academic year.

James A. Donahue, Jr., is assistant professor of economics at the University of Vermont.

Herbert Dorn has been promoted from lecturer and research professor to professor of economics at the University of Delaware.

Thomas W. Douglas, of the University of Virginia, has resigned to take a position with the Ice Marketing Institute of the National Association of Ice Industries, in Washington, D.C.

Edward A. Duddy, has become professor emeritus, University of Chicago, after having served on the faculty of the School of Business twenty-nine years.

Samuel W. Dunn, of the School of Business Administration, University of Pittsburgh, has been granted a leave of absence for the current academic year.

Manuel Eber has been appointed instructor in economics, Washington University, St Louis.

Robert S. Eckley has been apponted assistant professor of economics at the University of Kansas.

George H. Ellis has been appointed instructor in economics and business administration at the University of Maine.

Howard S. Ellis, professor of economics on leave of absence from the University of California, is directing a study of the long-run implications of the European Recovery Program for the Council on Foreign Relations. He will be part-time visiting professor of economics at Columbia University in the Winter session.

Paul T. Ellsworth, of the University of Wisconsin, has been granted a leave of absence for the first semester to teach at the University of California.

Henry J. Engler is now assistant professor of management at Loyola University, New Orleans.

M. Erselcuk has been promoted from assistant professor to associate professor of economics at Purdue University.

William J. Fellner, of the University of California, is on sabbatical leave in the fall semester to do research work in Europe.

Allen R. Ferguson, of Harvard University, has been appointed assistant professor of economics at the University of Virginia.

Peter A. Firmin has been appointed assistant professor of economics in the College of Commerce and Business Administration, Tulane University.

William C. Flinn has resigned from Emory University to accept a position in the Industrial Management Division of the Georgia School of Technology.

Laurence A. Fouraker has resigned as instructor in economics at the University of Wyoming to continue graduate work.

Henry J. Frank has been appointed part-time instructor in economics at New Jersey College for Women.

John A. Frechtling has been appointed instructor in economics at Swarthmore College.

Robert W. French, of the University of Texas, has been appointed dean of the College of Commerce and Business Administration, Tulane University.

Joseph F. Fulton, formerly of New York University, is an instructor in economics at Michigan State College.

Nicholas Georgescu, formerly of the University of Bucharest and more recently of Harvard University, has accepted a position as professor of economics at Vanderbilt University.

Franklin W. Gilchrist has been promoted to associate professor of marketing in the School of Commerce, University of Southern California.

Curry W. Gillmore has been appointed instructor in political economy at the Johns Hopkins University.

Morris D. Glickfeld, of the Univesity of California, has accepted an appointment as acting assistant professor of economics at the University of Washington.

Carter Goodrich, of Columbia University, served as program director and chairman of the United Nations Scientific Conference on the Conservation and Utilization of Resources held at Lake Success August 17 to September 6.

Howard S. Gordman has been appointed associate professor of business administration at the School of Commerce and Finance, Saint Louis University.

Donald F. Gordon has been appointed instructor in economics at Princeton University.

Amor Gosfield has resigned as instructor in economics at the University of Pennsylvania to accept an appointment at the University of Puerto Rico as director of a special study of the Puerto Rican economy.

Benjamin Graham, president of Graham-Newman Corporation, has joined the faculty of the Graduate School of Business, Columbia University, as an associate.

James L. Green has resigned as instructor in economics at the University of Minnesota to join the faculty of Southern Methodist University as assistant professor of economics.

Joseph A. Green, Jr., of the University of Virginia, has been appointed head of the department of economics at Mississippi-Southern College.

H. Peter Greenwood, of the University of Illinois, has been appointed assistant professor of finance in the School of Commerce of the University of Southern California.

Morton Grossman has joined the staff of the department of economics, Washington State College.

Sarah M. Guy has been appointed instructor in economics at the University of Minnesota.

Louis M. Hacker, of Columbia College, has been appointed director of the School of General Studies, Columbia University.

Jean C. Halterman has resigned as instructor in business organization and management in the College of Business Administration, University of Nebraska.

David B. Hamilton, Jr., has resigned from the University of Texas to accept an appointment as assistant professor of economics, University of New Mexico.

Wiliam A. Hance, formerly assistant dean of Columbia College, has been appointed associate professor of economic geography in the Graduate School of Business, Columbia University.

Glover D. Hancock has retired as dean of the School of Commerce and Administration at Washington and Lee University.

Arnold C. Harberger has been appointed assistant professor of political economy at Johns Hopkins University.

C. Lowell Harriss has been granted a year's leave of absence from Columbia College to lecture at Stanford University.

Richard B. Heflebower, of the Brookings Institution, has been appointed professor of economics at Northwestern University.

Vern G. Hefte has resigned as assistant professor of accounting in the College of Business Administration, University of Tennessee.

John Heisler has been appointed instructor in economics in the College of Commerce, University of Kentucky.

Bert G. Hickman has been appointed instructor in economics at Stanford University.

A. J. Hill has been appointed instructor in accounting at Alabama Polytechnic Institute.

Forest G. Hill, of Columbia University, has been appointed lecturer in economics at the University of California.

Richard M. Hill has been appointed instructor in economics at Purdue University.

Franklin L. Ho has been appointed visting professor in the East Asian Institute at Columbia University.

Werner Hochwald has been promoted to associate professor of economics and acting head of the department of economics at Washington University, St. Louis.

Thomas W. Holland, on leave of absence from the Department of State, has been reappointed visiting professor of economics in the School of Business Administration, University of Miami.

J. Richard Huber, acting executive officer of the department of economics at the University of Washington, has been promoted from associate professor to professor of economics.

Harold Hughes has resigned as professor of economics from the College of Commerce and Business Administration, Tulane University.

Emily H. Huntington, of the University of California, is on sabbatical leave for the fall semester.

John Ise, of the University of Kansas, taught in Denmark during the summer.

John E. Jeuck, assistant professor of marketing, has been appointed assistant director of the Executive Program of the School of Business, University of Chicago.

Lewis K. Johnson has been named chairman of the department of commerce at Washington and Lee University.

Thomas F. Johnson, of the University of Virginia, has accepted a position in the Sugar Division of the Production and Marketing Administration, U. S. Department of Agriculture.

Eliot Jones, of Stanford University, was visiting professor of economics at the University of Washington during the spring quarter of 1949.

James R. Kay, of the University of Virginia, has been appointed assistant professor in the School of Business Administration, Univerity of Texas.

Eugene Kelley, of the Babson Institute, has been appointed assistant professor of business administration at Clark University.

David M. Kerley, of the University of Virginia, has been appointed assistant professor of statistics at Pennsylvania State College.

Frederick W. Killian, of Clark University, is on leave of absence in the current semester for further study and research at Yale University.

Charles C. Killingsworth has been promoted to professor of economics and head of the department of economics at Michigan State College.

Charles P. Kindleberger, of the Massachusetts Institute of Technology, has been appointed visiting lecturer in the European Institute, Columbia University, for the current academic year.

Paul Kircher has been promoted to assistant professor of accounting at the University of Chicago.

Joseph M. Klamon has been appointed professor of commerce in the School of Business and Public Administration at Washington University, St. Louis.

William H. Knowles has resigned from Humboldt College to accept a position as assistant professor of economics at Michigan State College.

Clifton H. Kreps, Jr., has resigned as assistant professor of economics at Denison University to accept an appointment as research economist with the Federal Reserve Bank of New York.

Paul G. LaGrone has been appointed assistant professor of accounting and finance at Alabama Polytechnic Institute.

H. K. L'Ecuyer has been appointed visiting associate professor of industrial management at the University of Kansas.

Leland C. Lehman, of Ohio State University, has been appointed assistant professor of economics at Denison University.

John K. Lewis has been appointed instructor in economics at Washington University, St. Louis.

Irma A. Linse, of Indiana University, has joined the faculty of the University of Minnesota as instructor in economics.

Samuel M. Loescher has been appointed instructor in economics at Indiana University.

Kullervo Louhi has been promoted to assistant professor of accounting at the University of Chicago.

Donald A. Ludwig has been appointed instructor in economics at Clemson College.

Erik Lundberg, professor of economics at the University of Stockholm and director of the Swedish Institute for Research in Economic Fluctuations, will be visiting professor of economics at the University of Washington in the spring of 1950.

Rodney F. Luther has rejoined the faculty of the School of Business Administration of the University of Minnesota as lecturer in economics and marketing.

George Malanos has been appointed assistant professor of economics in the School of Business Administration of the University of Miami.

Theodore F. Marburg, of Princeton University, is on leave during the first term of the curent academic year to complete a research study.

Dale C. Marcoux, on leave from Washburn University during the current academic year, is lecturer in economics at the University of Minnesota.

Howard D. Marshall has been appointed instructor in economics at Vassar College.

Kenneth M. McCaffree, of the University of Chicago, has joined the department of economics of the University of Washington as acting assistant professor.

Donald McClelland, of Princeton University, has been appointed assistant professor of economics at the University of Buffalo.

John A. McClure, of Rutgers University, has been appointed associate professor of management in the School of Commerce of the University of Southern California.

Robert B. McGehee, of Emory University, has accepted a position with the Tennessee Valley Authority.

George W. McKinney was recently appointed associate economist of the Federal Reserve Bank of Richmond.

James P. McMahon has been promoted from lecturer to associate professor of finance in the School of Business Administration of the University of Miami.

Robert T. McMillan, formerly of Oklahoma A. & M., has joined the department of economics and business administration of the Alabama Polytechnic Institute.

Richard R. Mead, research analyst of the Greyhound Corporation, has been appointed professor of marketing in the School of Commerce of the University of Southern California.

Jorge Mendez has been appointed a member of the economic section of the International Labor Office, Geneva, Switzerland.

Sidney B. Merlin, of the International Bank for Reconstruction and Development, has been appointed associate professor of economics at the University of Buffalo.

Hyman P. Minsky has been appointed assistant professor of economics at Brown University.

James N. Morgan, on leave of absence from Brown University, is with the Survey Research Center at Ann Arbor, Michigan.

Charles A. Myers has been promoted to the rank of professor of industrial relations at Massachusetts Institute of Technology.

Frank W. Naggi has been appointed associate professor of accounting and director of the Bureau of Economic and Business Research, School of Commerce and Finance, Saint Louis University.

Edward Neuner, Jr., has been appointed visiting assistant professor of economics at the University of Southern California.

William H. Newman, formerly of the Wharton School of Finance and Commerce, University of Pennsylvania, has been appointed professor of business administration in the Graduate School of Business, Columbia University.

Nian-tzu-Wang has been appointed instructor in economics at Columbia College.

Howard W. Nicholson, of Harvard University, has been appointed instructor in economics at the University of Virginia.

John C. Norby, of the University of Minnesota, has been awarded the Olaf Halvorson Fellowship by the American-Scandinavian Foundation for travel and study in Norway during the current academic year.

Walter G. O'Donnell has been appointed instructor in economics at Columbia College.

Henry M. Oliver, Jr., of Northwestern University, has been appointed professor of economics at Indiana University.

Norman C. Olson has been appointed assistant professor of economics at Concordia College.

John E. Orchard, on leave of absence from the Graduate School of Business, Columbia University, is serving as executive assistant to W. Averill Harriman, deputy administrator for the Economic Cooperation Administration.

Herman F. Otte has returned to the Graduate School of Business, Columbia University, after a year in South America, where he was engaged in field work on industrial development.

Henry T. Owen has been promoted to associate professor of economics in the College of Commerce and Business Administration, Tulane University.

Martin D. Palm has been appointed assistant professor of economics in the College of Commerce and Business Administration, Tulane University.

Robert W. Paterson has been appointed instructor in rural economics at the University of Virginia.

Andrew Paton has been appointed instructor in the College of Commerce, University of Kentucky.

Gardner Patterson has been appointed associate professor of economics and director of the International Finance Section, Princeton University.

W. N. Peach has resigned from the faculty of Syracuse University to become director of economic research at the University of Oklahoma.

George Pearce has been appointed instructor in business administration at the School of Commerce and Finance, Saint Louis University.

Walter H. Pearce has been appointed instructor in economics in the College of Commerce of the University of Kentucky.

Harry E. Peery has been appointed instructor in business organization and management in the College of Business Administration at the University of Nebraska.

Clinton A. Phillips, of Vanderbilt University, has been appointed instructor in economics at Baldwin-Walace College.

M. Ogden Phillips has been named chairman of the department of economics at Washington and Lee University.

Karl P. Polanyi is in London, England during his leave of absence from Columbia University in the first semester of this year.

J. Richard Powell has been appointed assistant professor of economics at the University of Texas.

Raymond P. Powell has been appointed instructor in economics at Princeton University.

John P. Powelson has been appointed assistant professor of accounting at the University of Buffalo.

Thomas F. Quinn has been appointed dean of the School of Commerce and Finance, Saint Louis University.

Clark Randall has been appointed instructor in economics at the University of Kansas.

Lawrence F. Ritter, of the University of Wisconsin, is now instructor in economics at Michigan State College.

James G. Robinson, of New York University, has been appointed visiting assistant professor of retailing in the School of Commerce of the University of Southern California for the year 1949-1950.

Benjamin A. Rogge, of Northwestern University, has been appointed assistant professor of economics at Wabash College.

Sam Rosen has been appointed assistant professor of economics at the University of Wyoming for the current academic year.

David Rosenblatt, of the Bureau of the Budget, is visiting assistant professor of economics at Carnegie Institute of Technology in the current year.

Gideon Rosenbluth has been appointed instructor in economics at Princeton University.

Samuel Rubin has been promoted to the rank of professor of transportation in the School of Commerce, University of Southern California.

Jacob Schmookler, of the University of Pennsylvania, has accepted an appointment as instructor in economics at Michigan State College.

Karl de Schweinitz, Jr., of Yale University, has been appointed assistant professor of economics at Northwestern University.

Joseph Shister, of Yale University, has been appointed associate professor of industrial relations in the School of Business Administration, University of Buffalo.

William F. Shors has been appointed professor of accounting and head of the department of accounting at Butler University.

Carl S. Shoup, of the Graduate School of Business of Columbia University, spent the summer in Japan studying the Japanese tax situation for SCAP.

George P. Schultz has been appointed assistant professor of industrial relations at Massachusetts Institute of Technology.

Earl R. Sikes, of Dartmouth College, is on a sabbatical leave of absence during the current semester.

Charles E. Silberman has been appointed lecturer in economics at the School of General Studies, Columbia University.

Herbert A. Simon, of Illinois Institute of Technology, has been appointed professor and head of the department of industrial administration at Carnegie Institute of Technology.

Samuel Van D. Smith has been appointed instructor in commerce in the School of Business Administration, University of Pittsburgh.

T. H. Smith has been promoted from assistant professor to associate professor of economics at Purdue University.

Tillman M. Sogge, of St. Olaf College, went to Japan in the past summer as consultant for the Economic and Scientific Section of SCAP to continue work begun there in 1948.

Ezra Solomon has been appointed instructor in business administration at the University of Chicago.

William R. Spriegel has been appointed chairman of the department of management and associate dean of the College of Business Administration, University of Texas.

Hubert F. Stepp, of the University of Virginia, has been appointed professor of economics at the College of Charleston, Charleston, S.C.

Wolfgang F. Stolper has been appointed associate professor of economics at the University of Michigan.

Robert Summers has been appointed acting instructor in economics at Stanford University.

Zenon Szatrowski, of the University of Oregon, has been appointed associate professor of statistics in the School of Business Administration, University of Buffalo.

Philip Taft has been appointed chairman of the department of economics, Brown University.

W. Bayard Taylor, professor of business economics at Claremont Men's College has been appointed dean of the faculty.

Paul S. Taylor, of the University of California, Berkeley, is on sabbatical leave for this semester, doing research on agricultural labor.

Philip E. Taylor has been promoted from associate professor to professor of economics at the University of Connecticut.

William O. Thweatt, II, of the University of California at Los Angeles, has been appointed assistant profesor of business administration and economics at George Pepperdine College.

Charles S. Tippetts, head master of the Mercersburg Academy, has been re-elected vice chairman of the Board of Directors of the Federal Home Loan Bank of Pittsburgh.

C. F. Joseph Tom has been appointed instructor in economics at Beloit College.

L. Reed Tripp has joined the staff of the University of Wisconsin as lecturer in economics.

Ross M. Trump, of the American College of Life Underwriters, has been appointed professor of marketing at the School of Business and Public Administration, Washington University, St. Louis.

John G. Turnbull, of the research administration of the Social Science Research Council, has joined the staff of the School of Business Administration, University of Minnesota, as associate professor.

David G. Tyndall, of Cornell University, is now assistant professor of economics at Carnegie Institute of Technology.

Abbott P. Usher, recently retired as professor of economics at Harvard University, is visiting professor of economic history at the University of Wisconsin during the present academic year.

Andre L. Van Assenderp has resigned from the College of Commerce and Business Administration of Tulane University to join the faculty of Florida State University.

Thurman W. Van Metre, professor of transportation in the Graduate School of Business, Columbia University, is retiring in October, 1949, after thirty-three years of service.

Rutledge Vining, who has been on leave of absence with the National Bureau of Economic Research, has returned to his teaching at the University of Virginia as professor of economics and statistics.

William B. Wait, of Cornell University, has been appointed visiting assistant professor of finance in the School of Commerce, University of Southern California.

Irving H. Wallace, of the University of Minnesota, has joined the faculty of Augsburg College in Minneapolis as assistant professor of economics and marketing.

F. Bernard Ward, of George Washington University, has been appointed assistant professor of accounting at Marquette University.

Gerald E. Warren has been promoted to professor of economics in the College of Commerce and Business Administration, Tulane University.

Ralph S. Watkins, director of research of Dun and Bradstreet and director of the Office of Plans and Programs of the National Security Resources Board, will offer a seminar in economic mobilization planning at the Graduate School of Business, Columbia University, in the Spring session, 1950.

John T. Weatherwax has been appointed instructor in accounting at the University of Kansas.

Murray L. Weidenbaum has been appointed fiscal analyst in the Bureau of the Budget.

Lionel Weiss, of Columbia University, has been appointed assistant professor of statistics at the University of Virginia.

Barton A. Westerlund has been appointed instructor in economics in the School of Business Administration, University of Miami.

J. Fred Weston, of the University of Chicago, has accepted an appointment as lecturer in business finance at the University of California at Los Angeles.

John T. Wheeler has been promoted to the rank of associate professor in the School of Business Administration, University of Minnesota.

David E. White, of Clark University, has been appointed assistant professor of economics at the University of Vermont.

Charles W. Williams, of the University of Louisville, has been appointed vice president, Federal Reserve Bank of Richmond.

J. Brooke Willis has been promoted from assistant professor to associate professor of banking in the Graduate School of Business, Columbia University.

William B. Wolf has been appointed instructor in industrial relations at the University of Chicago.

Albert E. Wolff has been appointed professor of marketing and international trade at Loyola University, New Orleans.

Charles E. Wuller has been appointed associate dean of the School of Commerce and Finance, Saint Louis University.

Herman J. Wyngarden has been appointed dean of the School of Business and Public Service, Michigan State College.

FORTY-SIXTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNIVERSITIES AND COLLEGES

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. A notation as to the earlier lists, extending from 1905 to 1927, may be found in the *Review* for September, 1927, page 574. Annual lists thereafter are to be found in the September number of the *Review* for each year.

The present list specifies doctoral degrees conferred, doctoral dissertations completed and accepted by the various universities, and the theses still in preparation. The last date given is the probable date of completion. In cases where the publishers of completed dissertations were given, this information has been reported.

The list represents the status of the several theses on June 15, 1949, except for a few items later reported as completed or published.

Economic Theory; General Economics

Degrees Conferred

PIETRO CASTIGLIONI, Ph.D., Florida, 1949. The Utility Approach to Monetary Theory.

ARLEIGH P. HESS, JR., Ph.D., Pennsylvania, 1949. An Analysis of the Significance and Applicability of the Competitive Theory of Value to Practical Problems in Urban Residential Real Estate Valuation.

WILLIAM S. JOYCE, Ph.D., Harvard, 1949. The Economics of Luis de Molina: A Study in the Development of Scholastic Economics in the Sixteenth Century.

JOHN H. MORRMAN, Ph.D., Iowa State, 1949. A Study of Basic Economic Concepts in the High School Curriculum.

ALLEN M. SIEVERS, Ph.D., Columbia, 1949. Has Market Capitalism Collapsed? A Critique of Karl Polanyi's New Economics. (Published as No. 553, Columbia Studies in History, Economics, and Public Law.)

Theses Completed and Accepted

KENNETH J. ARROW, B.S., College of City of New York, 1940; M.A., Columbia, 1941. Measurement of Economic Stability. 1949. *Columbia.*

CECIL H. MEYERS, M.A., Iowa State, 1948. The Economics of Henry George. 1949. *Iowa State.*

Theses in Preparation

LAWRENCE ABBOTT, B.A., Harvard, 1921. Non-Price Competition. 1951. *Columbia.*

D. PHILLIP BEAUDRY, JR., B.S., Kansas, 1931; M.B.A., 1933; M.A., Harvard, 1935. Profit Concepts. 1950. *Harvard.*

KATHARINE ALLEY BEYER, B.A., Vassar, 1944. The Economics of Multiple Products. 1951. *Columbia.*

VINCENT F. BOLAND, B.A., Buffalo, 1941. Professor A. C. Pigou's Welfare Economics. 1950. *California at Los Angeles.*

HOWARD A. BOURNE, B.A., Doane College, 1937; M.A., Chicago, 1940. The Economic Concepts of Several Religious Leaders. 1950. *Chicago.*

MAURICE L. BRANCH, B.A., Michigan State, 1946; M.A., Wisconsin, 1947. Historical Development of Scientific Method. 1951. *Wisconsin.*

JOE E. BROWN, B.S., Texas College of Arts and Industries, 1939; M.S., 1941. Population Theory and the Value Problem: An Institutional Economic Analysis. 1949. *Texas.*

LESLIE E. CARBERT, B.A., British Columbia, 1946; M.A., Columbia, 1947. Studies in the Theory of Consumption and Expenditures. 1951. *Columbia.*

ALFRED F. CHALK, B.A., Baylor, 1934; M.S., Texas A & M, 1936. The Impact of Natural Law Theories on the Formation of Political Economy. 1950. *Texas.*

JOSEPH CROPSEY, B.A., Columbia, 1939; M.A., 1940. Re-interpretation of Adam Smith. 1951. *Columbia.*

ROBERT DORFMAN, B.A., Columbia, 1936; M.A., 1937. Problems Involved in Economic Model Building. 1951. *California.*

BARNETT S. EBY, B.A., Southern California, 1927; Th.B., Princeton Theological Seminary, 1935; M.A., Princeton, 1942. Economics and the Concept of Justice. 1950. *Princeton.*

CORNELIUS A. ELLER, S.J., M.A., Georgetown, 1940. A Synthesis and Criticism of the Major Economic Doctrines Contained in the Writings of John Atkinson Hobson. 1950. *Saint Louis.*

ROBERT FERBER, B.S., College of City of New York, 1942; M.A., Chicago, 1945. An Economic and Marketing Study of Consumption Theories and of Consumption Functions. 1950. *Chicago.*

DANIEL R. FUSFELD, B.A., George Washington, 1942; M.A., Columbia, 1947. The Economic Thought of Franklin D. Roosevelt. 1950. *Columbia.*

PATRICK W. GEARTY, B.A., St. Paul Seminary, 1941; M.A., Catholic, 1947. Economic and Social Philosophy of Monsignor John A. Ryan. 1950.

IRWIN GERARD, B.S.S., College of City of New York, 1941; M.A., Columbia, 1947. The Economic Thought of William Jennings Bryan. 1951. *Columbia.*

JAMES B. GILES, B.B.A., Texas, 1936; M.A., 1937. Influence of Wage Costs upon Rates of Technological Progress. 1950. *Columbia.*

DONALD F. GORDON, B.A., Saskatchewan, 1944; M.A., Toronto, 1946. Some Aspects of the Theory of Distribution, Employment and Equilibrium. 1949. *Cornell.*

HOWARD H. GREENBAUM, B.S., Columbia, 1939; M.S., 1945. Fund Analysis of Transactions in Economic Research. 1950. *Columbia.*

DAVID B. HAMILTON, B.A., Pittsburgh, 1940; M.A., 1941. Economic Theories and Social Change. 1950. *Texas.*

WILLIAM H. HOHMAN, S.J., M.A., Weston College, 1938; S.T.L., 1944. The Economic Content of Social Justice in Early Modern Scholastics. 1950. *Saint Louis.*

L. JOHN KUTISH, B.S., Iowa State, 1943. Proportionality in the Theory of the Firm. 1950. *Wisconsin.*

ALEXANDER KUTSCHEROFF, B.A., Wesleyan, 1946. Chernyshevsky's Social and Economic Philosophy. 1950. *Columbia.*

FRANCIS L. LOEWENHEIM, B.A., Cincinnati, 1947; M.A., 1948. Bismarck's Economic Thought and Policies before the Empire. 1951. *Columbia.*

JOSEPH P. MCKENNA, B.S., Harvard, 1946. Demand for Durable Consumer Goods. 1950. *Harvard.*

LIONEL W. MCKENZIE, B.A., Duke, 1939. Utility Theory and the Welfare Concept. 1950. *Princeton.*

MORRIS MENDELSON, B.A., Queen's University, 1946. Some Aspects of Consumer Behavior. 1950. *Cornell.*

PAUL A. MONTAVON, B.A., St. Mary's Seminary, 1942; M.A., Catholic, 1947. Economic and Social Thought of John Mitchell. 1950.

ROBERT OSBORN, JR., B.A., Princeton, 1943; M.A., 1948. The Concept of Mobility in Economic Theory. 1950. *Princeton.*

ALAN L. RITTER, B.A., DePauw, 1935. The Application of the Theory of Imperfect Competition to the Determination of Wages. 1950. *Wisconsin.*

JEROME ROTHENBERG, B.A., Columbia, 1945; M.A., 1947. Veblenian Contributions to Welfare Economics: An Essay on the Societal Approach to Economic Theory. 1950. *Columbia.*

IRVING H. SIEGEL, B.S., College of City of New York, 1934; M.A., New York, 1935. Conception and Measurement of Production and Productivity. 1950. *Columbia.*

ROBERT E. SMITH, M.A., California at Los Angeles, 1947. A Survey of Modern Theories of the Rates of Interest. 1950. *California at Los Angeles.*

WARREN L. SMITH, B.A., Michigan, 1947. The Relations between Macroeconomics and Microeconomics. 1951. *Michigan.*

DARRELL L. SPRIGGS, M.S., Illinois, 1947. Contemporary American Wage Theory. 1949. *Illinois.*

GEORGE J. STOLNITZ, B.A., College of City of New York, 1939; M.A., Princeton, 1942. Dynamic Theory of the Firm. 1950. *Princeton.*

MALCOLM URQUHART, B.A., Alberta, 1940. Capital Accumulation, Technological Change, and Economic Progress: A Study of Economic Change with Special Reference to the Functional Distribution of Income. 1950. *Chicago.*

PETER VUKASIN, B.A., California, 1941. Implications for the Scope and Method of Economics of the Transition from Value Theory to Price Theory in the 19th Century. 1950. *California.*

Economic History; National Economies

Degrees Conferred

AARON M. BOOM, Ph. D., Chicago, 1948. The Development of Sectional Attitudes in Wisconsin, 1820-40.

LOUIS A. CANTERERO, Ph.D., Iowa State, 1948. The Economic Development of Nicaragua, 1920-1947.

JEROME B. COHEN, Ph.D., Columbia, 1949. Japanese War Economy. (Published by The International Secretariat of the Institute of Pacific Relations, University of Minnesota Press, 1949.)

JAMES F. DOSTER, Ph.D., Chicago, 1948. Railroad Regulations in Alabama.

ROBERT B. HARLEY, Ph.D., Iowa State, 1948. The Land and Society in Maryland in 18th Century.

KEACH D. JOHNSON, Ph.D., Iowa State, 1949. The Establishment of the Baltimore Company.

AUBREY C. LAND, Ph.D., Iowa State, 1948. Dulany the Elder: A Study in Achievement

DON E. LIVINGSTON, Ph.D., Saint Louis, 1949. Market Development and Price Formation in Colonial and Territorial St. Louis.

Theses Completed and Accepted

WILLIAM HALLER, JR., B.A., Amherst, 1936; M.A., Columbia, 1938. The Puritan Frontier: Town-Planning in New England Colonial Development, 1630-1660. 1949. *Columbia.*

REGINALD C. S. SHEPPARD, B.A., Wales, 1939; M.B.A., New York, 1940. The Depressed Area of South Wales. 1949. *Columbia.*

Theses in Preparation

THAD P. ALTON, B.A., Alabama, 1935; M.A., 1936. Polish Post-War Economic Planning 1950. *Columbia.*

RENZO BIANCHI, B.A., Chicago, 1936; M.A., 1938. Guild Proposals for Economic Organization. 1950. *Chicago.*

JACK BLICKSILVER, B.A., Queens College, 1948. A Study of the Defenders and Defense of Big Business and the Concentration of Wealth in America, 1865-1900. 1951. *Northwestern.*

KATHLEEN W. BOOM, B.A., Alabama College, 1939; M.A., Alabama, 1940. J. Rosenwald Fund and Southern Education. 1950. *Chicago.*

DAVID BRADFORD, B.A., Michigan, 1930; M.A., 1931. The Development of Sectional Attitudes in Ohio, 1845-1860. 1949. *Chicago.*

DAVID D. BURKS, B.A., Carleton College, 1945. Dawn of Manufacturing in Mexico. 1950. *Chicago.*

WALDO CRIPPEN, B.A., Washburn College, 1927; M.A., Chicago, 1932. The Kansas-Pacific Railroad: A Cross Section of an Age of Railroad Building. 1949. *Chicago.*

HARRY S. CROWE, B.A., Manitoba, 1947; M.A., Toronto, 1948. The State and Economic Life in Canada. 1951. *Columbia.*

FRANCIS J. DONOGHUE, B.A., Boston, 1939; M.A., 1940; S.T.L., Weston College, 1946. Economic and Social Policies of John C. Calhoun. 1950. *Columbia.*

FRANCIS DUNCAN, B.A., Ohio Wesleyan, 1943; M.A., Chicago, 1947. History of the Detroit & Cleveland Navigation. 1951. *Chicago.*

NEIL B. DUNLAP, B.A., Alabama, 1941. Expansion of the Soviet-Asian Economic Frontier. 1949. *Chicago.*

MELVIN A. EGGERS, M.A., Indiana, 1941. Industrial Expansion in Japan. 1950. *Yale.*

J. WILLIAM FREDRICKSON, B.S., Northwestern, 1938; M.A., Chicago, 1942. American Shipping and Foreign Commerce 1789 to 1860. 1950. *Chicago.*

IRVING GARBATI, B.S.S., College of City of New York, 1942; M.A., Columbia, 1948. From Laissez-faire to the Labor Party (A Study of the British Trade Union Movement in Transition). 1951. *Columbia.*

ELEANOR S. GODFREY, B.A., Smith, 1935; M.A., Chicago, 1936. Government Regulation of Industry in the Reign of James I as Illustrated by the Monopolies. 1949. *Chicago.*

MCGREGOR GRAY, B.A., Reed, 1941; M.A., Columbia, 1942. The Financial Policy of the Emperor Hadrian. 1950. *Columbia.*

DOROTHY GREGG, B.A., Texas, 1943; M.A., 1945. The Transformation of Inventions into Pecuniary Symbols: The Case of the Steamboat. 1951. *Columbia.*

ERNEST C. HARVEY, B.Com., British Columbia, 1941; B.A., 1942; M.A., Columbia, 1948. The Pattern of Economic Growth in Arkansas, 1900-1950. 1951. *Columbia.*

ANNE HEENE, B.A., Barnard, 1943; M.A., Columbia, 1941. Economic and Social Origins of the Republican Party in New York State. 1950. *Columbia.*

CLYDE HEWITT, B.A., Aurora College, 1937; M.A., Chicago, 1939. Venezuela and the Origins of Dollar Diplomacy. 1949. *Chicago.*

HAROLD L. HITCHENS, B.A., Chicago, 1935; M.A., 1936. The United States and the Isthmian Routes, 1823-1878. 1949. *Chicago.*

FRANCES M. HORNING, M.A., Radcliffe, 1947. The Agrarian Reform in Puerto Rico. 1950. *Harvard.*

NIHAD IBRAHIM-PASHA, Baccalaurist, Aleppo, 1941; in Philosophy, 1942; Licence en Law, Beirut, 1942. Foreign Trade and the Syrian Economy. 1951. *Columbia.*

HYMAN KURITZ, B.S., Milwaukee State Teachers College, 1938; M.A., Columbia, 1947. The Socialists and the Trade Union Movement, 1865-1914. 1951. *Columbia.*

GRACE H. LARSEN, B.A., California, 1942; M.A., 1945. The Philadelphia Merchant, 1763-1776. 1950. *Columbia.*

LI-SENG LI, B.A., Cambridge (England), 1947. Chinese Communists' Economic Policy for the First Stage of China's Transformation—the Stage of New Democracy. 1951. *Chicago.*

BENJAMIN LIGHTMAN, B.S., Rhode Island State College, 1943; M.A., Columbia, 1947. The New York Business Community in Civil War and Reconstruction. 1951. *Columbia.*

S. S. LIOU, M.S., Cornell, 1946. Possibilities of Improving the Chinese Agricultural Situation Through Industrialization. 1949. *Minnesota.*

BERNARD C. MATTSON, B.A., Oberlin, 1922. Radicalism in the United States, 1787-1800. 1950. *Chicago.*

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EDGAR F. TABER, B.A., Amherst, 1938; M.A., Columbia, 1940. Statistical Cost Curve for a Power Laundry. 1950. *Columbia.*

Economic Systems; Planning and Reform; Cooperation

Degrees Conferred

VERNON R. ESTEVES, Ph.D., Harvard, 1949. Economic Policy for Puerto Rico.
KARL DESCHWEINITZ, Ph.D., Yale, 1949. Power Relationships in the Price System.

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ARTHUR L. BEKENSTEIN, B.A., West Virginia, 1941; M.A., Columbia, 1942. The Origins and Distinctive Nature of Consumer Cooperation: An Economic Analysis. 1951. *Columbia.*
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ARTHUR G. AUBLE, Ph.D., Harvard, 1949. The Depressions of 1873 and 1882 in the United States.

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Business Finance; Investments and Security Markets; Insurance

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RAYMOND R. COLTON, B.S., College of City of New York, 1931; M.A., Columbia, 1932. Regulation of Public Securities as Legal Investments in New York State. 1950. *Columbia*

E. RAYMOND COREY, B.A., Amherst, 1941; M.B.A., Harvard; M.A., 1947. The Private Placement of Life Insurance Investments. 1950. *Harvard.*

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MICHEAL GORT, B.A., Brooklyn, 1943. Towards a Capital Outlay Policy—Investment Timing in the Electric Light and Power Industry during the Business Cycle. 1951. *Columbia.*

RALPH T. GREEN, B.A., Texas A&M, 1942; M.S., 1947. Financing of Small Business in the Houston, Texas, Area. 1951. *Duke.*

MATTHEWS M. JOHNSON, B.S., Temple, 1936; M.A., Pennsylvania, 1939. The Philadelphia Mortgage Market. 1951. *Pennsylvania.*

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ARTHUR F. MESENGER, B.A., Ohio Wesleyan, 1927. Liquidity in the Security Markets. 1950. *Ohio State.*

JOHN R. NICHOLS, B.A., Baldwin-Wallace, 1941; M.A., Ohio State, 1946. Economic Factors Basic to Stock Prices. 1951. *Ohio State.*

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Public Finance

Degrees Conferred

WILLIAM H. ANDREWS, JR., Ph.D., Chicago, 1949. Financing Public Relief, Welfare, and Health in Indiana.

James M. Buchanan, Ph.D., Chicago, 1948. Fiscal Equity in a Federal State.

Harold H. Cutler, Ph.D., Iowa State, 1949. Property Tax Levies in Utah.

Harry P. B. Jenkins, Ph.D., Chicago, 1948. Financing Adequate Public Services in Nova Scotia.

Vernon O. Johns, Ph.D., Kansas, 1948. Property Taxation in Virginia.

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Accounting, business administration, economics: Woman, Ph.D. Extensive teaching experience. Publications. Now employed but desires appointment on West Coast. Available in September, 1949. E109

Principles and problems, consumer economics, economic and social movements, international economics, economic and social progress, social security, theory, social science, sociology (marriage and the family): Man, 47, married, Ph.D., University of Illinois. Seventeen years of college teaching experience; 7 years of industrial experience; several years of marriage counseling with emphasis on premarital counseling; 1 year of social work. Wishes position in economics or economics and sociology where emphasis is on sincere teaching rather than research. Available in September. E127

Economic principles, public finance, corporate control, banking, investments, and accounting: Man, married, 44, Ph.D., University of Missouri. Sixteen years of successful college teaching; business experience in banking and production work; lieutenant commander, U.S.N.R. Now chairman of social science division and professor of economics in medium-sized, state-supported college. Prefers straight teaching position but would consider combination of teaching-administration work; salary and rank commensurate with responsibilities of the job; prefers Middlewest or West Coast location. Available in September, 1949. E156

Business, social and industrial psychology, human relations: Man, mature age, Ph.D. Outstanding references; employed; desires advancement. Available on short notice. E245

International economics, principles of economics, money and banking, national income, public finance, business law: Man, 40, Ph.D., University of Frankfurt (Main); U. S. citizen. Eight years of experience as economist with U. S. government agencies and with leading private economic research organization; now teaching at Eastern college. Available in September, 1949. E255

EDWIN WALTER KEMMERER

Twenty-eighth President of the American Economic Association, 1926

Edwin Walter Kemmerer was born in Scranton, Pennsylvania, June 25, 1875. He died in Princeton on December 16, 1945. He prepared for college at Keystone Academy, Factoryville, Pennsylvania. After receiving a Phi Beta Kappa key and an A.B. degree from Wesleyan University in 1899, he went to Cornell University for two years as a fellow. In 1903 he received his Ph.D. degree, having served as instructor in economics and history at Purdue University in the interval. His doctoral dissertation was entitled, "Money and Credit Instruments in Their Relation to General Prices," a study which helped to equip him for a career as a money specialist. His first public appointment was as financial adviser to the United States Philippine Commission (1903-06). He returned to Cornell University as assistant professor of political economy in 1906, attaining the rank of full professor in 1909. In 1912 he moved to Princeton, where he spent the remainder of his academic life. In 1928 he was appointed Walker professor in international finance and director of the newly-established international finance section at Princeton. He retired from active service in 1943.

Professor Kemmerer served as financial adviser to a number of countries in both hemispheres and formed numerous groups or commissions of experts to investigate and report on currency and fiscal reforms. These accomplishments in the field of public affairs brought him many honors. Academic honorary degrees were granted him by Wesleyan, Occidental, Oglethorpe, Rutgers, Columbia, and by many universities in Ecuador and Bolivia. Nonacademic honors and awards came from Colombia, Poland, Ecuador, and Belgium.

Professor Kemmerer became a member of the Association in 1903, served from 1907 to 1910 as managing editor of the *Economic Bulletin*, predecessor to the *American Economic Review*, and was a member of the Board of Editors of the *Review* from 1911 to 1913. The title of his presidential address in 1926 was, "Economic Advisory Work for Governments."

Most of Professor Kemmerer's publications dealt with currency reforms and the operation of monetary systems under the gold and other standards. He was an uncompromising advocate of the gold standard and such books as the *A B C of the Federal Reserve System* and *Modern Currency Reform* had a tremendous vogue. His later life was devoted to the defense of a convertible currency based on gold. He was president of the Economists' National Committee on Monetary Policy when he died. He had been one of the organizers of this Committee in 1933 and one of its most active members.

An obituary of Edwin Walter Kemmerer, prepared by four of his colleagues at Princeton, was published in the *American Economic Review*, March, 1946, pages 219-221.

Number 28 of a series of photographs of past presidents of the Association.

E. W. Kemmerer

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A THEORY OF DELIVERED PRICE SYSTEMS

By GEORGE J. STIGLER*

The debate over the merits and legality of basing point price systems began in the early nineteen-twenties and followed a leisurely course until April 26, 1948. On that day the Supreme Court outlawed the multiple basing point price system in cement, and the debate now became continuous and urgent, and sometimes disingenuous. The debate has been unusual in that the participants have commonly used the same, relatively undisputed facts to support opposite contentions. The cross-hauling of products has been interpreted by one party as a by-product of innocent competition, by the other party as evidence of collusion. The absorption of freight has been used by one party as evidence of the desire of firms to compete, by the other party as evidence of price discrimination.

If it is true that controversy over basing point prices has sometimes manufactured uncertainty, it is also true that uncertainty among economists has encouraged the controversy. No economist, so far as I know, has yet offered a satisfactory explanation for the appearance of delivered price systems. One important branch of the literature, associated with the names of Fetter and Mund and with the Federal Trade Commission, argues that basing point prices are simply a device hit upon by conspiring oligopolists.[1] The other important branch of the literature, in which de Chazeau and J. M. Clark are prominent names, argues that the basing point price system is an inevitable or highly probable development in industries characterized by heavy fixed costs, cyclically unstable demands, and oligopoly. Neither group has explained why this particular system of marketing evolved (rather than

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[1] Professor F. Machlup's recent *The Basing-Point System* (Philadelphia, Blakiston, 1949) is also in this tradition. At several points he also touches on the fundamental element of the theory to be presented in this paper (pp. 165-66, 197, 211-12), as, indeed, do most of the writers on the subject.

possible alternative systems such as division of territory) nor has either group explained why other industries which share the characteristics they stress have adopted f.o.b. and other pricing systems.[2]

If the explanation to be given here is correct, basing point prices represent a collusive oligopolistic policy which maximizes the oligopolists' profits under particular but not uncommon economic and legal conditions. I, therefore, accept the positive contentions of both groups and seek to reconcile them through a study of the detailed rationale of delivered price systems. After a preliminary discussion of terminology, the theory of uniform delivered prices will be sketched, tests of the theory will then be examined, and finally the major implications of the theory for economic policy will be drawn.

I. *Types of Geographical Price Systems*

The price a buyer pays for a delivered commodity may vary continuously with the distance of the point of delivery from the point of production, or it may vary discretely or not at all (zone price systems). The chief forms of price quotation that lead to continuously variable delivered prices are:

a. F.o.b. mill prices. The delivered price at any point equals the price at the production center at which the purchase is made plus the actual transportation charge to the point of delivery.

b. Freight equalization. The delivered price at any point equals the lowest sum of factory price plus transportation charges from any production center, even though the purchase is made at another production center.

c. Basing point. This system differs from freight equalization in that not all production centers quote mill prices.[3]

These distinctions are quantitative, and not generic. If transportation costs are a trifling fraction of delivered prices, all systems of variable delivered and zone prices merge.[4] If there are mill price quotations

[2] Professor A. Smithies, who falls in neither group, concluded that the basing point price system did not in general maximize profits and, indeed, that it was comprehensible only under special assumptions whose relevance to the basing point industries was not demonstrated and is not obvious. See "Aspects of the Basing Point Price System," *Am. Econ. Rev.*, Vol. XXXII, No. 4 (Dec., 1942), pp. 705-26.

[3] If one does not wish to treat importation points as production centers, a second general difference is that not all points of mill price quotation are production centers.

[4] Zone prices will also emerge in a continuously variable delivered price system if transportation costs do not vary continuously with distance: for example, in the late 'thirties Douglas fir had the same transportation cost from the Pacific Northwest to all points north of the Ohio River and east of Chicago, so equality of price in this region was consistent with f.o.b. mill pricing. Such exceptions are eliminated if we define distance as economic distance.

(basing points) at all important production centers, the distinction between freight equalization and basing point prices is unimportant. If the price at one mill is equal to that at the nearest mill plus transportation cost, the former price is non-effective and a basing point system is achieved. The fundamental distinction is between f.o.b. mill and delivered price systems when freight costs are an appreciable fraction of price, and we proceed now to establish analytical criteria for this distinction.[5]

Consider first the common situation in which there are two or more firms at a production center. A firm at this center can increase its sales, relative to what they would be if the firm adhered to the same f.o.b. mill price as its rivals, by two types of price reductions: first, by price reductions within the natural territory of the center (say that defined by stable f.o.b. mill prices); and second, by absorbing freight in order to enter other production centers' territories. If the firm makes price reductions (reductions in mill-net prices) only or chiefly by absorbing freight, and never or seldom by reducing prices to customers in its natural territory, it is practicing what I shall term systematic freight absorption. If the firm frequently uses both price reductions within its territory and freight absorption, I shall term its behavior competitive.[6] If the firm seldom makes either form of price reduction, it is presumably a participant in an agreement to divide the market and fix the price.

If there is only one firm at a production center, it can take sales from other firms only by invading their natural territories. The preceding argument still applies, but it must be restricted to the sales in areas where two or more firms are selling: it is difficult to define competitive behavior in areas where there are no competitors. The hypothetical example in Table I will illustrate this case. If Firm I practices systematic freight absorption, its mill-net price declines as it makes sales beyond its natural market limit (F); in the area of overlapping sales (say D to H) the only form of (mill-net) price reduction is through freight absorption. If the firm behaves competitively, it will reduce the delivered price at points where its mill-net price is highest (D to F in our example) in order to take sales away from Firm II, before it begins absorbing freight to enter H's natural territory; so in the area

[5] Zone price systems will not be discussed; see, however, note 15, below.

[6] It would be inexplicable if the firm reduced its price (relative to that of its rivals) within its territory and yet failed to absorb freight on some sales.

If the firm behaves competitively, on the above definition, its prices are indistinguishable from f.o.b. mill prices. This definition of competition is identical with that of the neoclassical theory if the latter is amended (as it should be) to incorporate the fact that on all except completely centralized exchanges the competitive firm sells at different prices to different customers in a period of price change.

of overlapping sales, I's mill-net price will not vary systematically with the point of sale.

Both situations—one and several firms at a production center—can be summarized in one definition of systematic freight absorption. A firm is practising systematic freight absorption if, at the consuming

TABLE I.—NUMERICAL EXAMPLE OF SYSTEMATIC FREIGHT ABSORPTION
(mill prices: $50.00)

Consumption Point	Transportation Costs from		Delivered Price	Mill-Net Prices	
	Firm I	Firm II		Firm I	Firm II
A	$ 0	$10	$50	$50	$40
B	1	9	51	50	42
C	2	8	52	50	44
D	3	7	53	50	46
E	4	6	54	50	48
F	5	5	55	50	50
G	6	4	54	48	50
H	7	3	53	46	50
I	8	2	52	44	50
J	9	1	51	42	50
K	10	0	50	40	50

points where it and one or more rivals are making sales, its mill-net price varies with the distance of the consuming point.

Systematic freight absorption occurs only under oligopoly. It involves price competition at the point of production and is therefore inconsistent with substantial competition: the mill-net price of a firm is less on sales made at delivered prices set by other mill prices (price bases) than on sales made on its own mill price, and under competition the firm would sell only or chiefly in the higher mill-net area.[7] Nor would a monopolist with spatially separated plants practice systematic freight absorption, for this would be irrational price discrimination. He would be varying his mill-net price, not in accordance with the elasticity of the buyer's demand, but on the basis of the selection of the plant from which to ship the order.

The desirability of this definition of systematic freight absorption (and the implicit definition of delivered price systems) must be judged by its usefulness. The definition clearly suggests that the formal method

[7] This is seldom disputed except in partisan arguments, and then only with astonishing implicit definitions of competition. One all-too-common definition of competition in this context is the policy of maximizing profits! For example, "As has been pointed out, mills at a considerable distance from a basing point have a freight advantage over other mills in selling to buyers in the territory around their mills. They behave competitively and naturally when they charge their customers a price which realizes that advantage." (U.S. Steel Corporation, *The Basing Point Method of Quoting Delivered Prices in the Steel Industry*, T.N.E.C. Monograph No. 42, p. 66.)

of price quotation is insufficient to classify an industry's geographical price system, and this is a source of difficulty in testing theories to which we shall return.

II. *A Theory of Delivered Prices*

The following analysis is restricted to industries in which (1) transportation costs are a substantial fraction of delivered price for many customers; (2) there are few firms (or few large firms) at a production center; and (3) these firms wish to (or are compelled to) collude. The firms in these industries must solve two problems: how to divide sales among the firms at each production center;[8] and how to divide sales among production centers—in such a way as to maximize the industry's profits.

The distribution of sales among firms at a production center must be on a non-price basis if mutually unprofitable price rivalry is to be avoided: the simplest legal solution of this problem would be to use f.o.b. mill prices and rely upon non-price competition to divide sales among firms.[9] Any delivered price system is slightly inferior for this purpose because it requires additional calculations and therefore gives rise to additional errors and sources of misunderstanding among the firms. There have been many quarrels in the basing point price industries over rounding off numbers at different decimal points, the uncertainties of land-grant freight rates on purchases by the federal government, trucking and water transportation, etc. But the inferiority of the delivered price system is only slight.

The second problem, the division of sales among production centers, could also be solved by f.o.b. mill prices,[10] were it not for one characteristic of demand, which on our theory is the fundamental requirement for a uniform delivered price system. This characteristic of demand is that it is geographically unstable, *i.e.*, the proportion of national or regional sales made in each consumption center is subject to substantial fluctuations. If a production center were to make all its sales within a given area, it would often be in a state of feast or famine relative to the industry.

With an unstable geographical pattern of demand, f.o.b. mill pricing

[8] Our primary interest is in the case where there are two or more firms at each of the important production centers because this appears to be more important empirically. It is one of the minor mysteries of the basing-point literature that almost all the analysis has been devoted to the case where there is only one firm at each production center.

[9] Several illegal systems, such as quotas or a joint sales agency plus quotas, might be more efficient. In the markets for homogeneous raw materials, however, non-price competition is not likely to become very expensive.

[10] Or by division of market areas—which indeed would be the effect of a stable system of f.o.b. mill prices.

would have one of two consequences in industries making non-storeable products. The firms at a production center might maintain stable prices (relative to other production centers), and then fluctuations in their rate of output would be large.[11] Not only would this unstable rate of production raise the costs of producing given outputs, but it would put a severe strain on the agreement among the firms: some firms would be losing money while other firms (perhaps multiple-plant firms with a plant in the same production center) were prospering. Or, alternatively, the price at the production center would fluctuate in response to changes in demand: rising high in feast periods to attract output from other production centers; falling low in famine periods to permit sales in other territories. This sort of unpremeditable flexibility of mill prices would make it extremely difficult to maintain collusion among firms at the production center, and even more difficult to maintain collusion between firms at different production centers.

These objections to f.o.b. mill pricing lose some weight if the product is storeable. Then stable rates of production may be reconciled with unstable rates of sale, through inventory adjustments. Yet inventory adjustments are not likely to eliminate the problem. If the product comes in many sizes and qualities, inventories would have to be enormous: for example, the specifications for steel products are so various that inventories do not provide a feasible method of meeting local fluctuations in demand.[12] The method of inventory adjustment is completely satisfactory only if fluctuations in the geographical pattern of demand cancel out quickly.[13]

If collusion could be complete—if the practices of a monopolist could be adopted—f.o.b. mill pricing would still be possible. The oligopolists could establish a joint sales agency, which would refer each order to the firm whose rate of production and distance from the buyer made it the most profitable source from which to fill the order. The group could compensate firms whose outputs were small in a given period at the cost of firms whose outputs had been large. A joint sales agency, however, is as easily detected as it is illegal under our antitrust laws.

Systematic freight absorption provides a satisfactory solution to all these problems. There is a single price at each point in the market (if

[11] At times the output of the production center would have to be impossibly large: for example, some large Western construction projects simply could not have been supplied within the permitted time by Western steel and cement capacity.

[12] It is interesting to notice that the cement industry considers its product to be perishable; see *Argument of George S. Leisure* (New York, Grosby Press, 1942), pp. 77-78.

[13] If the aggregate demand for the product of the industry is also cyclically unstable, there is an additional objection to the method of inventory adjustment. Inventories will be accumulated in regions in which recession first occurs, in the belief that this recession is an instance of geographical instability.

transportation charges are agreed upon), so price rivalry is eliminated. One production center can sell in the "natural" territories of other production centers when this is necessary to obtain its share of the industry's sales; these distant sales involve freight absorption, moreover, and are therefore partly self-limiting. The various prices need not change often, so collusion is possible. Given the unstable geographical pattern of demand and the antitrust laws, systematic freight absorption permitted efficient collusion.

Cross-hauling (simultaneous and geographically overlapping shipments from various production centers) is commonly held to be an important by-product of systematic freight absorption. It is difficult to see why cross-hauling should arise because of the inherent nature of the system: production center A will be selling in the area of production center B only when it cannot sell its share of the industry's sales in its own area, and, therefore, when B will not be selling in A's territory. Some cross-hauling will occur because of the variable time interval between orders and deliveries; this type of cross-haul would also exist under competition and probably under monopoly. Some cross-hauling will also occur because of the desire of firms to keep sales agencies in important markets, and this type of cross-haul (with more shipping of products and less of salesmen) is attributable to oligopoly. One would not expect cross-hauling to be a major waste under systematic freight absorption, however, and there is no empirical evidence that contradicts this expectation.[14] This is not to say that a system of distribution designed to insure a stable share of total sales for each production center will be efficient from the social viewpoint, for it will not be.

The choice by the industry between freight equalization and a basing point system will be determined primarily by the nature of the production centers. If the production centers are well separated, freight equalization is simple and satisfactory. If production centers are spread out, so the firms at a center are not equi-distant (in terms of transportation costs) from the important consumption centers, a basing point system will eliminate numerous minor complexities that would arise under freight equalization. The distinction betwen the two systems, however, is less significant and durable than that between f.o.b. mill and delivered prices.[15]

[14] Some writers use "cross-hauling" to describe all wastes in transportation (given the location of the mills); see Federal Trade Commission, *Price Bases Inquiry* (Washington, 1932), Chap. VIII. The issue is largely terminological, but the measures of the uneconomic movement of goods—it was assumed by the Federal Trade Commission that freight absorption measures this movement—are seriously deficient.

[15] The theory will not be elaborated to consider plant location, number of price bases, inter-base differentials, etc. In general, the more unstable the geographical pattern of demand the fewer will be the production centers (since each firm will locate where it can sell in many territories) and the fewer will be the base prices. Single base prices will be

TABLE II.—CONTRACT AWARDS FOR REINFORCING STEEL BARS, 1936[a]
(in tons)

Region and State	Quarter			
	First	Second	Third	Fourth
Northeastern States				
Connecticut	750	750	100	660
Maine	0	0	200	0
Massachusetts	1,276	2,005	2,908	3,315
New Hampshire	0	0	100	0
New Jersey	1,760	1,755	2,826	2,270
New York	15,340	4,200	14,088	4,169
Pennsylvania	6,400	5,700	425	950
Rhode Island	1,010	0	500	100
Vermont	0	0	150	240
North Central States				
Illinois	10,768	6,406	13,670	5,755
Indiana	700	920	1,325	800
Iowa	0	0	0	625
Kansas	1,700	350	0	0
Michigan	3,150	0	600	400
Missouri	2,855	925	1,375	750
Ohio	650	2,950	715	2,000
Wisconsin	945	1,550	985	653
Western States				
Arizona	525	528	0	0
California	43,874	31,901	30,185	20,039
Colorado	1,128	8,412	4,343	7,356
Idaho	122	0	125	518
Montana	15,891	726	3,575	152
Nevada	100	681	0	502
New Mexico	197	697	0	1,255
Oregon	100	1,315	0	124
Utah	0	0	0	280
Washington	4,509	2,282	706	117
Wyoming	357	389	597	0
Southern States				
Delaware	0	250	0	0
Kentucky	0	750	500	0
Maryland	2,700	0	0	0
Tennessee	0	0	300	0
Washington, D.C.	2,500	0	1,365	0
West Virginia	0	0	360	0

[a] Compiled from *Iron Age*, 1936.

used when a single production center is so large that it must often sell in every territory and other production centers are accordingly so small that they seldom need to sell to or past the dominant production center. (Obviously, if almost all production takes place at one center, there can be no systematic freight absorption or, for that matter, a problem of geographical prices.) Geographically unstable demand may lead to zone prices if transportation costs are not uniquely determinable; some of the late nineteenth century pools may be examples.

The system of formula differentials between prices of multiple products provides close analogies to systematic freight absorption.

III. *Testing the Theory*

We shall briefly discuss tests of the foregoing theory that create some presumption for its validity and then suggest further tests which have not been carried out.

Industries providing materials for large construction projects are likely to have geographically unstable demands; indeed this expectation gave rise to the theory. A sample investigation of contract awards for reinforcing steel bars, summarized in Table II, amply confirms the expectation.[16] The instability is more clearly brought out by the

TABLE III.—PERCENTAGES OF UNITED STATES CONTRACT AWARDS FOR REINFORCING STEEL BARS IN LEADING CONSUMING STATES, 1936

State	Quarter			
	First	Second	Third	Fourth
California	36.8	42.3	36.8	37.8
Colorado	.9	11.2	5.3	13.9
Illinois	9.0	8.5	16.7	10.9
Massachusetts	1.1	2.7	3.5	6.3
Montana	13.3	1.0	4.4	.3
New York	12.9	5.6	17.2	7.9
Pennsylvania	5.4	7.6	.5	1.8

percentage distribution of contract awards among the important consuming states (Table III).[17] The longer-term instability of demand is also implicitly illustrated by these tables: for example, California consumed almost four-tenths of the bars but had less than one-fifteenth of the industry's capacity to produce bars, while the chief producing states (Penn ylvania, Ohio, and Illinois) consumed relatively little.[18]

It was argued above that f.o.b. mill prices would have to be very flexible relative to one another in order to reflect the shifting locus of demand and thus permit the sales areas of production centers to expand and contract—so flexible, in fact, as to make collusion impracticable. We may test this view by a comparison of prices in a period of f.o.b. mill

[16] The data exaggerate the short-run geographical instability of demand because they include only contracts for 100 or more tons, which are no doubt less stable geographically than the smaller orders. The awards cannot be compared accurately with total production because of the unknown time lags in filling orders, but it appears that about 35 per cent of total sales in this period were accounted for by these contracts.

[17] Monthly contract awards, of course, show much greater instability. The correct time period for our theory will vary with the industry (being longer if inventories are possible) and with the variance of the time interval between orders and deliveries. It is interesting to notice that the California tonnages become much more erratic if the quarters are shifted back one week: 41,351; 15,969; 46,360; and 21,804 respectively.

[18] See *Directory of the Iron and Steel Works of the United States and Canada, 1938* (New York, American Iron and Steel Institute, 1938), p. 441.

pricing with those under basing point pricing (Table IV). Unfortunately, the same commodities cannot readily be used for both periods, but each seems representative of its period for the question in hand;[19] in both periods the demand for steel was rising. The comparison is qualified by the unknown amount of collusion in the earlier period and by

TABLE IV.—COMPARISON OF STEEL PRICES IN THREE MARKETS 1898–99, 1939–40[a]

Market	1898–99 Steel Billets	1939–40 Steel Bars
Pittsburgh		
Possible price changes	51	103
Price changes	27	1
Philadelphia		
Possible price changes	51	103
Price changes	38	1
Chicago		
Possible price changes	48	103
Price changes	21	1
Pittsburgh-Philadelphia Differential		
Possible changes in differential	51	103
Changes in differential	39	0
Pittsburgh-Chicago Differential		
Possible changes in differential	48	103
Changes in differential	34	0

[a] Based o . Tables A and B, appendix.

the uncertainty of the significance of quoted prices in both periods. Nevertheless, the prediction of the theory is dramatically confirmed as to both the frequency of price changes with f.o.b. mill and basing point prices and the stability of differences between prices at different production centers.[20]

Still another type of test of the theory is provided by changes in the behavior of basing point price industries in periods when the demand for their products is geographically stable: the theory predicts that systematic freight absorption will diminish. Steel has had such a demand stability in the postwar years because the industry has been practicing non-price rationing of buyers: the individual plant can sell all it wishes at its mill-net price. The prediction of the theory is fully confirmed:

[19] Billets had a much broader market in the earlier period, when vertical integration had not progressed so far.

[20] The collusive character of inter-base price differentials in the later period is shown in detail by de Chazeau; see D. R. Daugherty, M. G. de Chazeau, and S. S. Stratton, *Economics of the Iron and Steel Industry* (New York, McGraw-Hill, 1937), Vol. 2, Chap. XIII.

> Since the war almost all mills have stopped selling some products in certain distant markets and some mills have withdrawn on all products from some areas. . . .
>
> In today's seller's market it is actually possible for a steel company to reduce its freight bill in the face of rising freight rates by careful choice of customers and market areas. . . .
>
> Other f.o.b. mill sales are less obvious but it is known that some customers have been able to buy on f.o.b. mill pricing where it was a case of no discrimination; where the customer realized he was outside a mill's present market area and specifically asked for an f.o.b. mill price so as to get steel. Not all mills will sell this way.[21]

The practice of quoting an arbitrary Detroit base was also abandoned.[22]

The instability of the geographical pattern of demand in cement has been emphasized by the industry,[23] and it is documented by the geographical instability of concrete paving work and large construction projects.[24]

Our theory predicts that in industries with unstable geographical patterns of demand, the relative distribution of production among production centers will be more stable than the relative distribution of consumption under a basing point price system, *whereas the two distributions would be about equally unstable with f.o.b. pricing.*[25] *Were it not for the merging of the market areas of individual mills in the reports of the Bureau of Mines (no doubt because of disclosure prohibitions), it would be possible to compare exactly the relative stability of consumption* and production in each mill area. The best that can be done with the published data is to make such a comparison for certain adjoining states (Illinois, Iowa, Kansas, and Missouri).[26] The percentage of aggregate production and consumption (in the four states) has been calculated for each state for the period 1921 through 1940,

[21] *Iron Age,* May 13, 1948, pp. 119-20; see also *New York Times,* December 6, 1947, p. 23.

[22] Jones and Laughlin withdrew sheets and strip, and Republic and Carnegie-Illinois withdrew alloy bars, from the Detroit arbitrary base, *Iron Age,* May 13, 1948, p. 120.

[23] See Aetna Portland Cement Company *et al. v.* Federal Trade Commission, in the United States Circuit Court of Appeals of the Seventh Circuit, October Term, 1945, Appendix A to Brief of Respondents-Petitioners, pp. 80 ff.

[24] For data on city and state paving (in which one-fourth of all cement is normally used), see annual issues of *Cement and Concrete Reference Book.*

[25] Provided the inter-base price differentials were stable, as they appear to have been in cement; see Federal Trade Commission, *Cement Industry* (Washington, 1933), Exhibit Tables 9 and 10.

[26] Each of the states has four to six mills. Indiana is not reported separately; this distorts our analysis because it is the leading source of the Chicago market (indeed an Indiana mill is the base that sets the Chicago price). See annual issues of *Minerals Yearbook.*

and the coefficients of variation of these percentages are tabulated below:

State	Coefficient of Variation	
	Per Cent of Aggregate Production	Per Cent of Aggregate Consumption
Illinois	7.5	11.0
Iowa	12.2	19.6
Kansas	12.7	20.4
Missouri	5.9	15.1

In each state relative consumption was more variable than relative production, as the theory predicts.

Our theory makes collusion a requirement for a delivered price system. In industries where there are few large firms, collusion (whether tacit or overt) or coercion is usually more profitable to every large firm than price competition. Therefore, however proper the legal principle that the defendant is presumed to be innocent of conspiracy, it has no place in economics. Indeed the presumption is the opposite: it is more appropriate for the economist to ask why oligopolists compete as often as they do.

In the cement and steel industries, the evidences of overt collusion are ample. The basing point price system was put on a firm basis in the steel industry under Judge Gary's iron-hand-in-velvet-glove regime, and it was greatly strengthened under the N.R.A. The testimony in the cement case contains many instances of overt collusion. Foreign experience in these industries reinforces the conclusion that collusion is necessary to delivered price systems. The German cement industry was on a f.o.b. mill price system until a cartel was formed, after which it used delivered prices.[27] The German steel cartel used a basing point system,[28] and the English steel industry abandoned f.o.b. mill pricing for a delivered price system in the nineteen-twenties, after amalgamation and federation had proceeded far.[29]

The bituminous coal industry supplies some excellent illustrations of

[27] K. Ehrke, *Übererzeugung in der Zement Industrie von 1858–1913* (Jena, Gustav Fischer, 1933), pp. 14-15, 161.

[28] See *Die Deutsche Eisenerzeugende Industrie*, in *Ausschusz zur Untersuchung der Erzeugungs—und Absatzbedingungen der deutschen Wirtschaft* (Berlin, E. S. Mittler, 1930). A joint sales agency was used, but the collusion was not complete. Each of the large firms maintained a sales organization because, in the words of F. Thyssen, "one fine day the cartel could go up in air . . ." (*ibid.*, p. 315).

[29] See D. L. Burn, *The Economic History of Steelmaking, 1867-1939* (Cambridge, 1940), p. 377.

the role of collusion.[30] In the United States, coal was sold f.o.b. mine when the industry was not regulated; under the National Bituminous Coal Act of 1937, delivered prices were set and limited freight absorption was permitted and in some circumstances phantom freight required.[31] In Great Britain the development was parallel: f.o.b. mine prices were used before the compulsory cartelization of 1930; thereafter the industry moved toward a delivered price system.[32] The highly developed Rhenish-Westphalian syndicate was able to act like a monopolist for it had control over the marketing of all coal in the "uncontested" areas, and it set f.o.b. mine prices.[33]

Delivered price systems have been alleged or shown to exist in cast iron pipe;[34] rigid steel conduit;[35] various kinds of lumber;[36] copper, lead, and zinc;[37] plaster and lime;[38] plate glass;[39] floor and wall tiles,[40] and numerous other industries.[41] Some of these industries very probably have unstable geographical patterns of demand, for example, cast iron pipe, rigid conduits, and building materials.[42] In other of these

[30] The geographical pattern of demand for coal is apparently much more stable than that of steel and cement, but this is offset by the greater density of producing centers. On the pattern in Germany, see Johannes Schröder, *Der Absatzraum der Ruhrkohle* (Gieszen, Otto Kindt, 1929).

[31] R. H. Baker, *The National Bituminous Coal Commission* (Baltimore, Johns Hopkins University Press, 1941), pp. 140-41, 157, 193-94.

[32] See the annual survey numbers of the *Iron and Coal Trades Review,* for example, January 15, 1937, pp. 90-91; January 21, 1938, pp. 82-83.

[33] See J. H. Jones, G. Cartwright, and P. H. Guenault, *The Coal-Mining Industry* (London, Pitman and Sons, 1939), pp. 274-75. The Belgian cartel used a multiple basing point price system (*ibid.,* pp. 227-28).

[34] Clair Wilcox, *Competition and Monopoly in American Industry,* T.N.E.C. Monograph No. 21, p. 157.

[35] Triangle Conduit and Cable Co. *v.* Federal Trade Commission, 168 Fed. 2d 175 (1948).

[36] T.N.E.C. Monograph No. 33, *Geographical Differentials in Prices of Building Materials,* Chap. XIII; A. R. Burns, *The Decline of Competition* (New York, McGraw-Hill, 1936), pp. 291 ff.

[37] F. A. Fetter, *The Masquerade of Monopoly* (New York, Harcourt Brace, 1931), Chap. XIV.

[38] T.N.E.C. Monograph No. 33, Chaps. IV, VII.

[39] U.S. Tariff Commission, *Plate Glass,* Report 110, Second Series (Washington, 1936), p. 25.

[40] U.S. Tariff Commission, *Earthen Floor and Wall Tiles,* Report 141, Second Series (Washington, 1941), pp. 86 ff.

[41] There is also some evidence of the equivalent of delivered price systems on the buying side in the cottonseed industry (Federal Trade Commission, *Report on Cottonseed Industry* [Senate Doc. 209, Part 13, 71st Cong. 2d Sess.], esp. pp. 15,823 ff.) and in the buying of crude petroleum and iron scrap.

[42] The wire rope industry also shares this demand characteristic; see *Study of Pricing Methods* (Hearings pursuant to S. Res. 241 [the so-called Capehart Committee], pp. 311-12).

industries it is doubtful that freight absorption is systematic.[43] The one industry in which it seems probable that the geographical pattern of demand is stable and yet delivered prices are adhered to is beet sugar; I have not been able to establish definitely that it is an exception.[44]

Other tests of the theory, which have not been undertaken, can easily be suggested. Pig iron was sold f.o.b. mill before the N.R.A., thereafter, it was sold on a basing point system. According to our theory, this change is due to increasing oligopoly or increasing instability of demand. It is said that cement was sold f.o.b. mill on the Pacific Coast; if true, this case has similar implications to be tested.

The most general and satisfying test would be provided by a general measurement of the geographical instability of demand in oligopolistic industries, which could be compared with the pricing practices of these industries. If the industries with relatively unstable geographical demand patterns used chiefly delivered prices, and those with stable geographical demand patterns chiefly f.o.b. mill prices, it could not be doubted that the theory contains a large element of the correct solution.

This test does not seem feasible with the data now published. The most promising source of information on demand patterns is the quarterly reports on terminations of classes of railroad freight by states.[45] Unfortunately, this series does not extend back of 1940 (except by broad geographic areas); it lumps together wide classes of commodities; and often the state is too large a unit. The other serious problem, already referred to, is the inconclusiveness of the formal method of price quotation. The data necessary to measure the geographical instability of demand and the extent of systematic freight absorption exist in the sales ledgers of the firms, to which the academic investigator cannot always obtain access.

[43] In copper, for example, the existence of a single basing point is doubtful. Most refineries are near New York, most consumers in New England. "The quotation is almost always on a delivered basis—that is, the seller pays the freight to the buyer's plant. Sellers are willing to sell f.o.b. refinery, however, should the buyer so desire." E. H. Robie, "The Marketing of Copper," *Engineering and Mining Journal-Press,* April 21, 1923, pp. 704-9, quotation at p. 707.

[44] Corn sirup is also mildly troublesome. It was long quoted on a single base (Chicago). The geographical pattern of demand appears to be stable, at least in the short run. One is tempted to explain the single base by the geographical concentration of production and consumption. Over half the corn sirup is made in Illinois and most of the remainder in neighboring states. The chief demand for corn sirup is in candy and confectionery, and 30.5 per cent of the candy was made in Illinois in 1939 and only 8.2 per cent in all the other states producing large amounts of corn sirup. (See *Census of Manufactures, 1939.*) The Chicago base price therefore involved only a small amount of irrational (profit-reducing) price discrimination, and simplified the price structure.

[45] Interstate Commerce Commission, Tons of Revenue Freight Originated and Tons Terminated in Carloads by Groups of Commodities and by Geographic Areas (Statement No. Q-550 [S.C.S.]).

IV. *Conclusion*

If our theory of delivered prices is correct, we may easily dispose of the chief criticism that is made of the cement decision: that it will divide the nation into many local monopolies. Quite aside from the fact that this statement is wholly ambiguous (in that it tells us nothing of how strong these local monopolists will be), it is simply wrong because it overlooks the normal instability of demand in these industries. The individual plant cannot operate efficiently with an unstable demand in the area of its production and must therefore frequently invade other plants' areas.

The immediate effect of f.o.b. mill pricing in a period of non-price rationing is of course to increase the revenues of firms which have been absorbing freight.[46] With the restoration of price rationing and the customary geographical instability of demand, f.o.b. mill pricing will require a flexibility of prices that will often be beyond the reach of colluding oligopolists, so we may expect more frequent outbreaks of price competition. A period of increasing price competition may lead to either further mergers or alternative forms of collusive marketing, or to increasingly competitive behavior of these industries. The relative probabilities of these two outcomes depend chiefly on other and more fundamental elements of our antitrust policy than the prohibition of price discrimination.

[46] The steel industry also raised its mill prices at the time it shifted to f.o.b. mill pricing: semi-finished products rose 10 per cent and finished products 20 per cent from May to July, 1948 (*Steel*, January 3, 1949, p. 303).

APPENDIX

TABLE A.—PRICE OF STEEL BILLETS AT PHILADELPHIA, PITTSBURGH, AND CHICAGO, 1898–99[a]
(per ton)

Date			Price			Excess over Pittsburgh Price	
			Pittsburgh	Philadelphia	Chicago	Philadelphia	Chicago
1898	July	6	$14.50	$16.50	$16.25	$2.00	$1.75
		13	14.50	16.50	16.25	2.00	1.75
		20	14.50	16.50	15.75	2.00	1.25
		27	14.50	16.50	15.75	2.00	1.25
	August	3	14.50	16.25	15.75	1.75	1.25
		10	15.25	17.00	16.00	1.75	.75
		17	15.90	18.00	16.50	2.10	.60
		24	16.00	17.75	16.50	1.75	.50
		31	16.00	17.75	17.00	1.75	1.00
	September	7	16.00	18.00	17.50	2.00	1.50
		14	16.00	17.75	17.50	1.75	1.50
		21	16.00	18.00	17.00	2.00	1.00
		28	16.00	17.75	17.00	1.75	1.00
	October	5	15.75	17.75	17.00	2.00	1.25
		12	15.50	17.75	17.00	2.25	1.50
		19	15.50	18.00	17.00	2.50	1.50
		26	15.50	17.75	17.00	2.25	1.50
	November	2	15.15	17.25	17.00	2.10	1.85
		9	15.00	17.25	17.00	2.25	2.00
		16	14.85	17.00	17.00	2.15	2.15
		23	15.25	17.00	17.00	1.75	1.75
		30	15.25	17.00	17.00	1.75	1.75
	December	7	15.50	17.25	17.00	1.75	1.50
		14	16.00	17.25	17.50	1.25	1.50
		21	16.00	17.35		1.35	
		28	16.25	18.50	17.50	2.25	1.25
1899	January	5	16.25	18.55	17.50	2.30	1.25
		11	16.50	18.90	18.25	2.40	1.75
		18	16.50	19.50	18.50	3.00	2.00
		25	17.25	19.10	18.50	1.85	1.25
	February	1	17.25	19.25	18.50	2.00	1.25
		8	17.25	19.50	18.50	2.25	1.25
		15	18.00	20.50	20.00	2.50	2.00
		22	19.50	22.00	21.00	2.50	1.50
	March	1	22.00	24.00	23.00	2.00	1.00
		8	23.50	25.50	23.50	2.00	0.
		15	25.50	26.00	24.00	.50	−1.50
		22	25.50	26.00	25.50	.50	0.
		29	25.00	26.50	25.50	1.50	.50
	April	5	25.00	28.00	25.50	3.00	0.50
		12	25.50	27.50	25.50	2.00	0.
		19	25.50	27.50	25.50	2.00	0.
		26	25.50	28.00	25.50	2.50	0.
	May	3	26.00	27.50	25.50	1.50	−0.50
		10	26.00	28.50	27.50	2.50	1.50
		17	27.00	29.00	28.00	2.00	1.00
		24	28.00	29.75	28.50	1.75	.50
	June	1	29.00	30.50		1.50	
		8	30.00	31.00	32.00	1.00	2.00
		14	31.50	31.50	32.50	0.	1.00
		21	31.50	34.00	34.00	2.50	2.50
		28	31.50	34.00		2.50	

[a] Compiled from *Iron Age*.

TABLE B.—PRICE OF STEEL BARS AT PITTSBURGH, PHILADELPHIA, AND CHICAGO, 1939–40[a]
(per pound)

Date	Price			Excess over Pittsburgh Price	
	Pittsburgh	Philadelphia	Chicago	Philadelphia	Chicago
1939 January 7	2.25	2.57	2.25	.32	0.
...					
...					
...					
May 13	2.25	2.57	2.25	.32	0.
May 20	2.15	2.47	2.15	.32	0.
...					
...					
...					
December 23	2.15	2.47	2.15	.32	0.
1940 ...					
...					
...					
December 28	2.15	2.47	2.15	.32	0.

[a] Compiled from *Steel;* no price changes in unreported weeks.

THE PROBLEM OF CAPITAL ACCUMULATION

By Ernest H. Stern*

I

The net investments of each year, that is the net additions to the stock of durable equipment capable of producing goods or services, add to our productive capacity and, generally, to output. That growth requires that income, the measure of demand, should grow along with net investment if the existing balance between total supply and total demand is to be maintained. Credit is due to Professor Evsey D. Domar for having directed attention to the dynamic effect of investment.[1] If the net investments (I) of each year are α per cent of the output of that year, and their capacity to produce were s per cent of the net investments of each year, our total capacity to produce and, if all the capital stock were employed, our total output would rise at an annual rate of αs per cent. The Keynesian thesis, on the other hand, made any increase of income dependent on, and corresponding with, an increase of investment over the investment in the preceding period. According to that thesis, the income and therewith total demand grows at the rate of $K\Delta\alpha$ per cent where K is assumed to be a fairly stable factor dependent on the consumption and saving habits of a society. From the Keynesian thesis it follows that if $\Delta\alpha$ is zero, income will not rise, although α and therewith αs may be quite substantial, while from Domar's thesis it follows that output capacity and possibly output continue to rise, because α and s remain positive magnitudes, though they may not increase and may even decline. If both theses were unequivocal, the economy would be forever under the threat of the output capacities outrunning income and total demand.

This fear has haunted Domar in his article on "The Problem of Capital Accumulation" in the December 1948 issue of this *Review*. In this article he poses two main questions, *viz.:* (a) Whether income can rise at the rate of αs, and (b) If it can, whether it will so rise.

He maintains that the failure so to rise would render capital accumulation excessive, deter further investment and thereby cause unemployment. Domar is in doubt whether income can rise at the rate of

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[1] "Capital Expansion, Rate of Growth and Employment," *Econometrica*, Vol. 14, No. 2 (Apr., 1946), pp. 137-47. "Expansion and Employment," *Am. Econ. Rev.*, Vol. XXXVII, No. 1 (Mar., 1947), pp. 34-35.

αs, is therefore pessimistic as to the maintenance of full employment, but confesses that he can give no clear answer. He raises the question, but hardly examines it. However, in order to be able of applying himself to the second question, whether income will rise at the rate of s, he assumes for the sake of argument that question (a) were answered in the affirmative. His article centres therefore in his second question, whether income *will* rise at the rate of αs. Once more, Domar evades the answer. In fact, he hardly examines even this question. He only indicates that his reply is probably negative by stating that "existing institutional conditions" do not allow the volume of investment that is needed to keep pace with an output growing at the same rate of αs. He does not define these "existing institutional conditions." Instead, he puts forward a suggestion which falls into the realm of economic policy. He suggests that the supposed investment impeding influence of the "existing institutional conditions" could be overcome by the government guaranteeing that "for some time to come" income would grow at the αs rate. The mere guarantee would induce entrepreneurs to undertake the required volume of investment so that income would actually grow at the required rate of αs and the guarantee need never be put to the test. So far Evsey Domar.[2]

It will be the burden of this article to show that the problem of excessive accumulation of capital is quite different from that envisaged by Domar and that the reasons for the instabilities of income and of demand and employment and the magnitudes of the instabilities cannot be found in the fields where Domar searched for them; they may well be found in other fields. The useful conception of αs as the rate of growth of output is not abandoned, but it will be given a wider interpretation.

It would be easy to refute Domar by taking advantage of his many assumptions as to the nature of the economy. Throughout his article he uses output and income as synonymous and also investment and saving. This is of course the proper assumption if one looks back on the preceding period. In retrospect, output and income or net investment and net saving are synonymous and equal. Therefore, in retrospect the rate of growth of income is equal to the rate of growth of output, both being αs. The equalisation may have been brought about by various means, one of which may be the writing down of not fully employed capital equipment, which reduces both the magnitude of α, the latter being conceived as net after depreciation of all capital stock, and the magnitude of s, which is affected by any under-employment. Taking

[2] In the concluding section of his article and in an appendix Domar takes issue with Paul Sweezy on the latter's theory of underconsumption. This controversy does not directly concern Domar's argument that capital accumulation will become excessive if income grows at a smaller rate than the capital stock. This writer will therefore take no part in it.

advantage of those assumptions of Domar's one could easily prove that income always grows at the rate of αs and that both his questions are answered in the affirmative. In conditions as described by Domar, the problem of excessive capital accumulation would never arise.

The cold fact, however, remains that at times certain parts of output cannot be sold at the traditional or otherwise anticipated profits, or are assumed to become unsalable at those profits or any profits at all and that, in consequence, investments hitherto undertaken to cater for more of such output will no longer be undertaken. As a further consequence, the total of the annual investment no longer grows at the previous rate. $\Delta I = Y\Delta\alpha$ may become zero or even negative. In that case income (Y) being $KY\Delta\alpha$ would stagnate or even decline, whatever the magnitudes of K and Y, which by definition are positive. In that case there is a danger that output in terms of traditional prices and costs, unchanged in its composition and still rising at the rate of αs would tend even more to exceed the demand for it as money income tends to remain stagnant or even to decline. The equalisation of output and income will be enforced by the process of part of the output not being realised at the anticipated prices. This reduces the opportunities for certain types of investment, *but not for all investments.*

It is obvious that such a forceful downward adjustment need not occur, if two changes were made, *viz.:*

1. If the composition of output—in terms of money—were changed.
2. If the composition of αs—in terms of money—were changed, and changed in a manner that the product αs would decline although the factor α would increase, enabling $\Delta\alpha$ to remain positive and allowing income (Y) being $KY\Delta\alpha$ to continue to rise.

Domar has barred his way to examining these possibilities by a few more propositions in his paper, which are most unreal. These propositions are: (a) take no account of relative price changes;[3] (b) regard α as constant;[4] (c) regard s as constant.[5]

[3] "Nothing was said about the possible effects of relative price changes (or other factors) on the magnitudes of s and α" (*op. cit.*, p. 781). Not only were these effects on α and s excluded from the examination of the problem, but no effects of price changes were considered at all throughout the paper.

[4] This proposition is stated in a somewhat ambiguous way. At first, it is put as "Its refusal (*i.e.*, the refusal of α) to adjust itself to changes in the volume of investment, so as to assure continuous employment" (p. 779). All I can read into this statement is that α, on this occasion conceived as the money savings rate, *i.e.*, the unspent money income as a ratio to the money income received, that this kind of α may change but at a lower speed than the investment rate, the latter being the ratio of net new capital goods to net output. In other words, it suggests that the money savings rate is relatively constant as compared with the more volatile investment rate. This would be in contradiction to the use of α as synonymous with the investment rate.

Ambiguous as this passage is, it is later followed by an additional assumption that α is in fact fairly constant at 10-12 per cent of money income and of output and this magnitude is made the basis of further conclusions.

These propositions are the crux of the problem. Domar came close to realising it when, as quoted in footnotes below, he explained that "if s can be anything, our argument falls through." This would have been an opportunity to investigate whether s is changeable, and if it were found changeable, to give up the argument. If constancy in all three fields, *i.e.*, of price relations, of the investment rate and of the marginal capital productivity rate, is assumed, then indeed capital accumulation is bound to be excessive before long. However, what grounds have we in a "private capitalist economy in which the government plays a minor part"—another of Domar's propositions—to assume constancy in those three respects? Let us examine the facts. Right from the beginning we will state that "inertia" is a powerful factor in every society whether the latter is of the "private capitalistic" type or of the government directed type. It is an attribute of all human societies. Consequently, changeability and adjustability are impeded in every society. As a matter of fact, the case for government direction or government intervention is based on the supposed ability of government to either provide adjustability or to compensate for lack of sufficient adjustability.

Having admitted the power of inertia in society whatever the latter's organisation, we can proceed to examining whether and in which way changeability of the three factors enumerated above would effect the problem of capital accumulation becoming excessive.

II

The proposition to disregard changes of relative prices is in contrast with the fact that they are of the very essence of economic life, indeed some of its purpose. Whether we think in terms of money output, money income and investment values, or in terms of "real" output, "real" income and "real" investment, the uneven rates of growth of output of the manifold individual commodities and services lead of necessity to an uneven development of marginal values of each one of them in relation to all the rest. It would be a strange accident, never observed and not to be expected, if all the demand and supply schedules of every commodity and service had identical shapes. As they have not, man tries by his work and by his saving to increase the output of those whose marginal value is high, in preference to those whose marginal value is low. Capital accumulation becomes excessive not because income falls short of output—which is a contradiction—but because the

[8] This proposition is clearly stated on page 779. "The assumption of a stable s is necessary." A few lines previously it was stated as follows: "While strictly speaking, we shall treat s as a given constant, it need not be so. It is certainly not the same among various firms and industries. The national average (if such exists) can be made a function of time, interest rate, or of something else. But it must have some stability, because if s can be anything, our argument falls through and we are back at the Knight-Simons proposition."

accumulating capital is of a kind that the output it produces is, or threatens to be, of declining marginal value. That decline may be due to the shape of the demand schedules of the goods produced or to the shape of the supply schedules of the factors of production. Lest it be forgotten—as Domar forgot—when speaking of capital accumulation becoming excessive, we are dealing with values (measured in whatever money is used) and not with volumes of equipment. If it could be arranged that a falling demand schedule would be matched by correspondingly changing supply schedules of the factors of production or, in other words, if falling prices such as are necessary to meet a demand in the course of saturation were matched by reduced costs which in themselves do not reduce demand, in that case capital of a particular kind could continue to accumulate, without becoming excessive. It is never the case that all and every kind of capital becomes excessive, but only a particular kind of capital or groups of particular kinds. All this is old stuff, but wants re-stating. Lack of price and cost flexibility is at the root of capital accumulation becoming excessive. The decline of income (and employment) is not caused by total income falling behind output or even behind output capacity, but by the fact that the change in the composition of both output and income falls behind the changes in the supply and demand schedules that go hand in hand with rising output and output capacity.

The dependence of the excessiveness of capital accumulation on the changeability of prices, costs and profits may also be demonstrated as follows: Output increasing at the rate of αs and realised at stable prices might well produce increasing and not stable profits and therefore investment opportunities in excess of those leading to a rate of growth of αs. Contrariwise, an increasing output sold at falling prices may still enable the existing profits to be maintained and prevent capital accumulation from becoming excessive. Whether it does so or not, depends on changes of various supply factors, one of which is the change in the rate of interest.

III

Domar's other unreal proposition is to take α and s as constant. While in regard to price flexibility we only re-stated what has been known, though apt to be ignored in recent years, in regard to the assumed constancy of α and s, we may have to put forward some new aspects. If they are not wholly new—as is probably nothing in economic theory—they may bring to light again features which have been neglected. Domar was led to the proposition of α and s being constant, apparently by the following reasoning: If employment is to be maintained, income must rise at a steady rate and that rate must be equal

to αs. Consequently, αs must be constant. Note that only the product αs, and not each factor, would need to be constant. However, in order to save his argument, Domar assumed s to be constant. It had to follow that α would need to be constant too.

Such tests as have been made so far, indicate that s oscillates round a fairly stable average.[6] It is certainly not constant in the short run. Nor is α constant, whether in the long or in the short run. The very fact that the marginal propensity to consume most probably differs from the average propensity to consume and consequently the marginal propensity to save differs from the average propensity to save, would produce changes in $\acute{\alpha}$. Moreover, as may be stated here, though explained later on, the marginal propensity to consume and, therefore, the marginal propensity to save are themselves not constant. There is no reason, on theoretical grounds, why the difference of the marginal rates from the average rates and the changes of the former should combine to make the average rates constant, and there is no evidence that they do, but all the evidence that in retrospect they have not.

Though there is no ground to assume that either α or s are constant, it is still thinkable that their product αs might be constant. It is now time to point to a new, and in this writer's opinion, important aspect. The factors α and s are not independent magnitudes. More exactly, s and I, the investment underlying α and s, are interdependent. Nor is K independent of ΔI in the Keynesian formula $K\Delta I = \Delta Y$. The fact is that *investment* (I) *has both quantity and quality, the latter changing with the composition of* I. The productivity rate s, however, is a function of the quality, *i.e.*, of the composition of investment. More pronouncedly, the marginal productivity rate is a function of the quality of the marginal investment. Likewise, the composition of the marginal investment (ΔI) will affect the marginal propensity to consume and, therefore, the multiplier K in the Keynesian formula. A change in s following a change in the composition of investment will of course change the rate of growth of output, or at least of potential output. If before this change of composition, output of capital goods tended to outpace the demand for them at the prevailing prices and other conditions and, because of the relative rigidity of prices and other conditions, tended to produce the dreaded dearth of investment opportunities, a change in the composition of investments may immediately slow down the rate of growth of potential output without reducing the volume (at prevailing prices) of investment and saving. It can produce this effect, even while the volume of investment (at prevailing prices) increases. One well-known instance of such a change in composition is the sub-

[6] See this writer's article on "Capital Requirements in Progressive Economies" in *Economica*, N.S. Vol. XII, No. 47 (Aug., 1945), pp. 163-71.

stitution in the annual investment, of residential buildings for highly efficient machine tools. As much labour and capital resources may be spent on the former as on the latter, but the immediate annual output (value added after raw materials and wages, before depreciation) or potential output resulting from the installation of machine tools may be 100 per cent of the cost of investment, while that resulting from the erection of residential buildings may be 10 per cent. If it is objected that because of the different rates of depreciation, the productivity rates net of depreciation of the two types are nearly equal and the factor s is conceived as "net of depreciation," therefore, hardly changed, I would reply as follows:

It is correct that entrepreneurs when making their investment take account of anticipated profits, net of depreciation, otherwise they would not substitute long-life for short-life investments and that income is also distributed net of depreciation provision; however, it is also correct that the output that is offered for sale is increased by the gross output during the life of the equipment that produces it.[7] Let us put it into figures.

If in one period the marginal productivity rate (s) (gross before depreciation) were 0.33 and s (net of depreciation provision) 0.3 and if α (net) were 0.1 of output, the rate of growth of output would be 3 per cent p.a. This assumes that as much replacement expenditure is made as is provided for as depreciation. If the whole of α (net) were invested in machine tools and because of their high gross reproduction rate, the marginal productivity rate (s) were raised to 1.0, while actual replacement expenditure of the total capital stock remained almost unchanged, annual output during the life of these machine tools would increase by close on 1.0 times 0.1, or by close on 10 per cent. If the whole of α (net) were invested in houses and because of their low gross reproduction rate, the marginal productivity rate (s) were reduced to 0.1 gross while replacement expenditure of the total capital stock remained almost unchanged, annual output during the life of these houses would increase by somewhat less than 0.1 times 0.1, or by close on 1 per cent. Another illustration might envisage a situation in which all output not consumed, but available for investment, which may be 20 per cent of output, would be expended on weapons and military stockpiling. This expenditure of resources has a gross productivity rate of zero, if we overlook as is usual the intangible value of future external security. As the replacement expenditure of all the other capital stock continues, say at the rate of 0.1 annual output, net s becomes -0.1 and αs becomes negative. This is as might be expected, if a country devotes —as it might be forced by circumstances—all its output (gross before depreciation) to consumption or other "non-productive" expenditure.

[7] This discrepancy has already been observed by Keynes (*General Theory*, Chap. 8, IV).

In actual life we observe any combination of investment of varying shades of gross productivity from very high to zero and frequent changes of this combination.

The manner in which change in the quality, *i.e.*, in the composition of investment affects the multiplier K in the Keynesian formula can be illustrated as follows: Assume the total annual net investment (I) to consist of residential buildings only. In that case the goods and services made available for consumption and actual consumption of them would increase more than if net investment consisted of factories producing machine tools. This would be so irrespective of the previous consumption habits of the population. The increase in the consumption may be so great as to be nearly equal the increase of total annual net investment. In that case K (being $[\Delta C + \Delta I]/\Delta I$) would be very large but in the following period ΔI would be very small. Whether or not the interdependent changes of K and ΔI are of a magnitude, as not to affect the product $K\Delta I = \Delta Y$ need not be considered here. It is possible that it would affect that product and that consequently the ratio $K\Delta I/Y$, which is the rate of growth of income, would be affected too by the change in the composition of income.

It is apparent that a change in the composition of investment without any change in the value (at stable prices) of the aggregate, that is, in the (weighted) volume, of investment would produce divergencies from the prevailing degree of balance, as follows:

1. It would change the rate of growth of output that is available for sale, by changing the gross marginal productivity rate.
2. It would change the ratio which the annual income realised or assumed to be realisable (including annual corporate savings) bears to the annual output for sale, because the former is net of depreciation provision for the new investment, while the latter is gross of it. Such a change can be of considerable importance on short term fluctuations of employment.
3. It would change the impetus to increasing the income, inasmuch as it changes the multiplier and marginal net investment and possibly the product ($K\Delta I$) of these two factors.

In this writer's view the discussions of recent years stimulated by Keynesian and Marxian systems of thought have been too much occupied with the size of the investment and have overlooked the change in the composition of investment. Other schools of economic thought have, however, been well aware of the importance of a change in the composition of investment.

So far in this section it has been tacitly assumed that prices are stable and that productivity rates and investment rates are changed by the changes in the physical composition of investment and consequent technical factors. However, such changes also affect the marginal values of

the components of output, income, capital stock, consumption and saving all as expressed in money. This is another reason why the assumption of constant α and constant s is unreal. There are no grounds known yet why the effect on marginal values, and therefore on prices, cost and profits should lead to constancy of the money values of αs or of $K\Delta I/Y$.

In summary, the composition of investment as expressed in money is of the utmost importance from the point of view of its effects on the productivity rate (s) or on the multiplier (K) as well as from the point of view of its effect on relative price changes. There is interdependence not only between the subjects treated in this Section III, but also between these subjects and the subject treated in Section II. The problem of capital accumulation becoming excessive is inseparable from the problem of changeability of relative prices and of the changeability of α and s.

IV

It follows that Domar's remedy of "somehow" inducing people to continue investing—irrespective of the kind of investment—cannot assure a permanent equilibrium of output and demand. Of course, it may postpone for a while the unmasking of a disequilibrium. By so doing, it may even assist in making the disequilibrium more severe. As a matter of fact, compensating expenditure by government—although in recent years dressed up as a mere increase of spending—has always effected a change in the composition of expenditure and investment. Its value as a remedy, such as it is, is largely derived from the effect of it being a means of changing those compositions.

The question is apposite whether, and if so, to what degree unemployment is an appropriate means or even a justifiable accompaniment of effecting the necessary changes in prices, costs and the composition of output and income. Our generation has come to the conclusion that it is not the former and is doubtful whether it is the latter. We are still searching for more appropriate and justifiable ways. We should be honest and declare that we have not yet found justifiable means of effecting those changes that would not be accompanied by unemployment. The Keynesian thesis demanding a continuous increase of investment irrespective of its composition does not provide such means. Nor does *laissez faire* in a society in which the power of inertia is so strong as it is in all contemporary societies. Nor does the Russian system, in as much as we know its working, demanding as its price, *inter alia*, forced labour on a very substantial scale and many other compulsions. This writer has no solution to offer either at this juncture, the present article being only concerned with the analysis of the case. It may be, that by experiment with various forms of interventions we may stumble

into a solution. While those government interventions may aim at increasing expenditure or in the case of taxation and licensing of investment at reducing it, they may result in changing the composition of output and demand. The nations of the so-called Western World have only started to experiment. It is too early to evaluate the efficacy of the various doses of intervention. In the meantime, let us be clear in the recognition that capital accumulation becomes excessive and investment declines not because our society allows income to fall behind the required rate of *as*, but because the power of inertia in our society makes the changeability of the factors of output and expenditure fall behind the required changes in their composition.

The search for means of changing relative prices and the composition of investment without incurring unemployment is in no way furthered by an assumption that unemployment is solely a function of an insufficient rate of growth in the size of income. This assumption is implicit in Domar's article.[8]

This certainly endows the rate of growth of income with undue importance. Unemployment arises if and when the supply and demand of employment do not balance. The growth of income is a determinant of the supply. The demand is a function of several other variables. Some of the latter are quite independent of the growth of income. For instance, the rate of growth in the number of employables—an important variable of demand—is mainly determined by past birth rates and recent death rates, and to a lesser extent by rates of migration, and bears very little relation to the present growth of income. Another variable is the rate of change in the quality of the employables (skill, training, general education) as different from their numbers. Even this variable may be independent of, or only partly dependent on, present income. Other determinants may be less independent of the growth of income, but their rates of change are most probably very different from the rate of growth of income. Among those other variables, there will be found the working time per year per employable offered, the response of labour within the working time to the output opportunities offered, that is the labour productivity rate, as it were, and last but not least the rate of growth of annual income per employable that is demanded along with the number of jobs. As far as I am aware, economists have hardly ventured into the territory of the rates of growth of income from employment per employable that is demanded together with a rising

[8] In his previous papers, as quoted in the first page of this note, it was expressed as follows: "employment is a function of the ratio of national income to productive capacity" the latter explained as "total output when all productive factors are fully employed" ("Capital Expansion" etc., *op. cit.*, pages 139 and 137). Also *ibid.*, page 143, "The failure of the economy to grow at the required rate creates unused capacity and unemployment."

quantity of employment. That rate of growth of income demanded from employment is, however, another determinant of the required rate of growth of income. The rate αs is not the only one.

Conclusions

The αs conception, as formulated by Evsey Domar, was a progress in that it showed that expansion at the rate of $\Delta\alpha$ multiplied by a stable factor K, the Keynesian proposition, cannot assure equilibrium. It redirected attention to the dynamic elements in our economy. Its application to determine excessive capital accumulation and unemployment is, however faulty. ***In my view, studies in the effect of changes of the marginal capital productivity rate that are produced by changes in the composition of investment, and of course, in the mechanism which produces or permits the latter changes, are a preliminary to studies into the balance between output and demand (income).*** Without more knowledge about those effects, the question of how to avoid capital accumulation becoming excessive cannot be answered. Nor can the question of how changes in capital accumulation affect employment be answered without more knowledge of the determinants of the demand for employment.

Rejoinder

If my understanding is correct, these are the main points of Mr. Stern's note: (1) That no definite statement was made in my paper as to whether or not real income can or will grow at a certain rate. (2) That the concepts of saving, investment and income were used improperly. (3) That no account was taken of relative price changes. (4) That both α and s were incorrectly assumed to be constant.

In addition, Mr. Stern made several other suggestions which do not directly bear on my paper and therefore do not require an answer.

1. Mr. Stern is correct in asserting that no definite statement regarding the ability of real income to grow at the so-called required rate was made in my paper. The reason for this omission was, however, explained—the unavailability (to my knowledge) of the necessary empirical information. If Mr. Stern possesses it, we should all regret that he did not choose to enlighten us. In the apparent absence of such data, those who retain their interest in the subject may still continue—and I hope not without profit—to analyse the problem. Such a procedure is hardly an "evasion." If I were pressed for an answer, I would say that, as far as I can now tell, our past (and probably future) difficulties were not caused by the *inability* of income to grow at some required rate. In other words, physical limitations (of which labor shortage would be the most important one) were not the cause of our down-

swings, and the trouble lay in our institutional setup, or more specifically, in the manner in which investment decisions in our economy are made. I agree that this statement does not go very far; any attempts to develop a deeper and better explanation are welcome.

2. It is to the credit of the last war that it put an end (or at least I hope it did) to the useless debate about the proper definition of income, saving and investment. That so much time and space could have been devoted to such a sterile subject, certainly does not enhance the prestige of our profession. If Mr. Stern is still worried, he might reflect on the rôle played by changes in inventories in equating saving with investment. It is perfectly true that by defining income α and s in a certain manner, Mr. Stern could make income always grow at the required rate, just as by an appropriate definition of a full employment equilibrium, the economy could be said to remain perpetually in this happy state. But the usefulness of these demonstrations, except as intellectual exercises, is not immediately clear.

3. I readily agree with Mr. Stern that relative price changes perform important functions in this, as in most other economic problems, but I refuse to jump with him to the conclusion that given flexible prices, the problem of capital accumulation, and by implication—of employment—ceases to exist. Mr. Stern is free to construct any number of theoretical models in which behavior patterns are such that flexible prices do assure a state of continuous full employment. This pastime has attracted economists for many years. The discussions of the last two decades have shown that the whole question is more complex than that, and that flexible prices are a remedy which may either cure or intensify the disease.[9] Mr. Stern certainly confuses the issue when he argues that "It is never the case that all and every kind of capital becomes excessive, but only a particular kind of capital or groups of particular kinds" (Sec. II). In a changing society, some kinds of capital become excessive all the time, and not much can or need be done about it. But such partial maladjustments are not likely to cause depressions; by their very nature, these kinds of excessive accumulations of capital in some industries imply corresponding shortages in others. And Mr. Stern will be hard put to find capital shortages corresponding to the piles of unused capital in this country during the 'thirties.

4. And now, about the constancy of α and s. What Mr. Stern fails to realize is that this assumption has only a logical significance: it facilitates the mathematics involved. The real issue is not the constancy of α and s—and there is no reason why they should necessarily be con-

[9] See in particular Oscar Lange, *Price Flexibility and Employment* (Bloomington, 1944), and Don Patinkin, "Price Flexibility and Full Employment," *Am. Econ. Rev.*, Vol. XXXVIII, No. 4 (Sept., 1948), pp. 543-64.

stant—but whether or not they so adjust themselves to economic changes as to bring about a reasonably continuous state of full employment. If, for instance, the propensity to have falls whenever investment does, so that income is unimpaired, the whole problem of capital accumulation loses its significance as far as employment is concerned. But such an obliging behavior of α has not been witnessed in the past, and Mr. Stern has not convinced me that it will necessarily take place in the future.

As far as s is concerned, we are all aware that it differs among the various industries. There are industries with a low s, such as housing, railroads, hydroelectric installations, and evidently atomic energy plants, just as there are those with a high one, such as services. On the whole, high wages and low interest rates should encourage the former, but the question still remains whether these industries, requiring large capital outlay per unit of output and therefore frequently involving a high degree of risk, are best suited for private enterprise.

These, I believe, are the main issues which Mr. Stern's note has raised, and we may spare the reader's time by foregoing the argument about the minor ones. The problem under discussion—and probably any problem—transcends in importance what one or another individual said or meant to say. In this spirit, Mr. Stern's note should certainly be welcome.

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THE FEDERAL RESERVE AND MONETARY POLICY FORMATION

By GEORGE L. BACH*

The problem of establishing more effective arrangements for the formation and execution of federal economic policy has been the subject of lively discussion since presentation of the Hoover Commission reports to Congress. In the monetary field this stimulus has been augmented recently by repeated demands for a new National Monetary Commission to study the entire problem of our monetary and banking arrangements. It is the purpose of this paper to summarize a recent study made for the Hoover Commission of the actual procedures followed in modern American monetary policy-making (primarily by the Federal Reserve and the Treasury), to point out certain weaknesses which seem to be evidenced, and to suggest some considerations that appear to be important in devising more effective procedures for formulating and executing sound monetary policy. Certainly no administrative arrangement can guarantee good monetary policy, but some arrangements may be more promising than others.[1]

I. *The Setting for Monetary Policy Formation*

Congress's directive to the Hoover Commission was essentially to examine the executive branch of the federal government with a view to recommending ways to make it more efficient in carrying out its func-

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The views expressed herein are personal, and are not necessarily those of the Commission or its Task Force. The recommendations of the Commission's Task Force on the Federal Reserve System are summarized in Appendix N of the Commission's reports. The detailed analysis of the Federal Reserve System's policy-making activities is contained in a staff report under that name.

[1] Roughly, monetary policy is taken here to cover those actions by the federal authorities concerned which importantly affect the supply of, or demand for, liquid assets (currency, deposits, and government securities) by the non-banking public.

tions. But the efficiency of any policy-forming agency can be analyzed only in the light of goals or ends which the policies are supposed to help achieve. Does the agency make good policy is the basic question if the major function is to make policy.

In the case of the Federal Reserve, which is ordinarily considered the agency primarily responsible for monetary policy-making, the question of what kind of policy it should make is far from simple. The Federal Reserve Act provides amazingly little information on what the System's monetary (credit policy) duties are, though it contains vast detail on the service functions of the Federal Reserve (currency issue, check clearance, etc.).[2] Both the language of the act and its legislative history indicate that credit control (monetary policy) was conceived of as involving primarily due attention to the gold standard, plus maintenance of "sound" individual banking practices. Though the Banking Acts of 1933 and 1935 clearly envisaged an important rôle for Federal Reserve monetary (credit) policy, even they provided no mandate as to what specific objectives monetary policy should seek to achieve, outside of the original preamble and sprinkled admonitions against undue use of "speculative" credit. Directives to help achieve full employment, prevent inflations, or mitigate business fluctuations are conspicuously lacking. The exception is the Employment Act of 1946, which is of somewhat indirect and uncertain applicability to the quasi-independent Federa' Reserve, at least in the eyes of many observers.

In the absence of specific Congressional directives, it is necessary to posit standards against which present policy-making procedures can be judged. Limiting consideration to what is ordinarily termed credit, or monetary, policy, today the job of the Federal Reserve might reasonably be said to be: To regulate the cost and availability of money, both in the aggregate and in segments, so as to make a maximum contribution to high-level economic stability (roughly, full employment without inflation). This statement is in keeping with official Federal Reserve and orthodox economic pronouncements, although to mesh with the definition of monetary policy given above, "liquid assets" should be substituted for "money."

The current setting for monetary policy formation is so well known that detailed repetition would be pointless. In essence, traditional Federal Reserve control mechanisms (reserve requirements, open-market operations, rediscount rates) have become largely useless against inflation because a huge volume of government securities is outstanding in

[2] The preamble states the purpose of the Act as: "To provide for the establishment of Federal Reserve Banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish more effective supervision of banking in the United States, and for other purposes."

the hands of the commercial banks and the non-banking public, and because both Federal Reserve and Treasury authorities are committed (at least temporarily) to maintaining a low rate on long securities. Practically, this involves Federal Reserve support of the whole rate structure in governments when necessary, and in effect guarantees monetization of outstanding governments at the option of the banks and the public. But the support price itself is not the only issue. Even if interest rates were to rise, there would remain the war period heritage of a swollen liquid asset supply (currency, deposits, and government securities) in the hands of the public which would seriously hinder restrictive attempts by monetary and fiscal authorities.

In the broad sense, "monetary" and "debt" policy must be considered inseparable, if the importance of the public's *total* position on liquid assets (at least money plus government securities) is recognized, in contrast to the traditional concern with the supply of money alone. Not only may changes in the total volume of liquid assets influence investment and consumption spending directly, but indirectly as well through interest rates and credit rationing. Shifts in the holding of governments between banks and the public and changes in the structure of the debt outstanding may have similar effects. Debt management for years to come will almost inevitably play a major monetary policy rôle, regardless of the exact interest policy followed. Moreover, fiscal policy, like debt policy, inevitably has monetary effects, and effective fiscal policy increasingly appears to require appropriate changes in the supply and composition of liquid assets.

Given the fundamental decision to maintain long-term governments around par, the real issues on credit policy in the postwar period have thus centered around the prices at which the Federal Reserve stands ready to buy government securities offered directly or in the open market, and around the interest rates at which the Treasury refunds the maturing issues in the public debt. In fact, the two decisions have been inseparable. The Federal Reserve has changed its open-market policy (its pattern of buying prices for governments) only after full consultation with the Treasury; and changes in Federal Reserve buying prices on governments have been closely coordinated with changes in the interest rates offered by the Treasury on refunding issues. The determination of open-market policy has thus been essentially a determination, in effect jointly with the Treasury, as to the structure of interest yields on government securities. Given the decision to maintain low interest rates, Federal Reserve policy on reserve requirements and rediscount rates is of second-order importance for over-all monetary purposes, though it may importantly affect bank earnings and particular groups of borrowers and asset-holders. War finance has set a con-

fining stage for current monetary-fiscal policy-making, whatever administrative arrangements prevail, unless we are prepared to make rather drastic shifts in our debt structure or credit policy commitments.

II. *The Process of Monetary Policy Formation*

The legal structure of Federal Reserve policy-making machinery, encompassing primarily the Board of Governors and the Open Market Committee with basic responsibility in the former for major credit policies except for open-market operations, is well known to economists. As indicated above, continuation of anything like present debt and monetary arrangements promises to center emphasis on joint Federal Reserve-Treasury determination of the government security rate structure. In terms of Federal Reserve policy, open-market operations are the major focus.

Actual Federal Reserve policy-making reflects the facts of monetary interdependence. In practice, the separations between open-market and other credit policy-making is less sharp than would appear from the statute. The Board members constitute a majority of the Open Market Committee. Possibilities of changing reserve requirements are inevitably considered in Open Market Committee discussions, as an alternative or supplement to open-market operations. With seven identical members of both groups and close informal relations between the Board members and Bank presidents, the decisions in the two areas are on the whole closely integrated. The Reserve Bank presidents generally have a full opportunity to present their views on reserve policy; since voting control on all policy issues ultimately resides in the Board and since leadership of the Board chairman for over a decade has been strong on all major policy issues, the relative rôles of the Board and the Banks have not been greatly different for open-market, discount, and reserve requirement policy. In all, Reserve Bank influence is relatively informal, exercised through discussion and correspondence with the Board members more than through formal voting strength.

The Open Market Committee meets quarterly. On the day preceding each meeting, the twelve Reserve Bank presidents customarily meet in Washington to discuss common Reserve Bank problems and to consider developments in the credit policy area. While little concrete evidence is available, it appears that there has sometimes been a tendency for the presidents to consider themselves as something of a "bloc" during periods of controversy with the Board over open-market and reserve policy, though this has not been uniformly true and there is often disagreement among the Reserve Bank presidents. The presidents, often led by the president of the New York Bank, have often been

more inclined to favor cautious, mild policies that would be less disturbing to the normal courses of banking and the money markets than have the Board members.[3]

Open Market Committee meetings are informal. Discussion typically ranges freely over the entire field of credit policy. Those Reserve Bank presidents who are not at the time members of the Committee also almost invariably attend and participate as freely in the discussions as do the Committee members. This means, in effect, that meetings of the Committee consist of a minimum of 25 to 30 persons (seven Board members, twelve presidents, and ten or so staff members from the Board and Banks), the majority of whom feel free to participate actively in discussion. A group of this size, even though only twelve are voting members, has not been found a highly effective deliberative or executive body. It functions in considerable part as a medium for general discussion and examination of issues.[4]

Under the circumstances, much of the rôle of open-market policymaking is in effect delegated to in Executive Committee, operating under general directives from the full Committee. The Executive Committee consists of three Board members and two Reserve Bank presi-

[3] This was apparently true, for example, at various points during the war when the possibility of raising reserve requirements was considered; following the war when Board proposals to tighten up sharply on interest rates were under discussion; and when the Board recently proposed that additional special statutory reserve requirements (fulfillable by holding government securities) be imposed on member banks to check loan expansion. On highly technical questions such as these, where no definitive criteria for action are available, it is only natural that the Reserve Bank presidents, whose daily work throws them in intimate contact with the commercial banks of their districts, should sense and appreciate fully the problems faced by the bankers. The Board members, on the other hand, are further removed from the private banking community and are apt to evaluate higher the possible "public" advantage (for instance, checking inflation) even at the cost of reducing private bank earnings or disrupting normal money market procedures.

An example is the contrast between the Board of Governors' views on postwar anti-inflation policy as presented by chairman Eccles, and those presented by president Sproul of the New York Reserve Bank, before the joint Congressional Committee on the Economic Report in 1947-48. The Board sought added reserve requirement powers to take active steps against inflation through checking bank credit expansion, while Mr. Sproul doubted the need for further action in the credit field and specifically opposed the vigorous, "clumsy" method of raising bank reserve requirements if any action were to be taken, favoring instead a more tentative, less "disruptive" approach. Chairman Eccles' testimony was given on November 27, 1947 (reprinted in the *Federal Reserve Bulletin*, December, 1947, pp. 1455-63) and on April 13, 1948; President Sproul's testimony was on May 12, 1948.

[4] When the vote is taken on a policy directive to the Executive Committee, it is usually unanimous. The last divided vote on a formal directive to the Executive Committee occurred in 1943. Unanimous votes were common during the earlier history of the Committee, though less uniformly so. This ordinarily represents a compromise to which unanimous agreement can be obtained, though in some cases there are no substantial disagreements to be compromised and the leadership of the chairman in establishing his views has been very strong. It is apparently felt that a unanimous vote is desirable, possibly to present a united front against possible policy criticism from outside the system.

dents, with the Board chairman as chairman and the president of the New York Bank as vice chairman. Day-to-day market operations are carried on by the manager of the System Open Market Account, acting in close consultation with the two leaders of the Executive Committee and with the Treasury. The account manager, who is also a vice president of the New York Reserve Bank, plays a rôle involving substantial discretion and money market prestige in carrying on the account's day-to-day dealings. Under the recently adopted policy dropping a fixed pattern of rates, the account manager must in essence "make" day-to-day System open-market policy within an appreciable range of operating discretion.

During and since the war, the most crucial part of Committee policy formation has occurred through the discussions between its representatives and the top officials of the Treasury. All major decisions as to the government security market rate structure are considered in these conferences. Such policy discussions, covering the entire range of financing and credit policy, have been long and time-consuming. Their size and formality vary. Recently, the Board chairman and New York Reserve Bank president (chairman and vice chairman of the Open Market Committee) have frequently met informally with the Secretary and Undersecretary of the Treasury. Often a few senior staff members from both agencies are included, since relatively technical details are of major importance in many financing decisions. Sometimes joint Federal Reserve-Treasury staff working parties develop agreed staff recommendations, but this is rare. More commonly, each agency has developed its own program, based on separate consultations with the banking community, which it proposes for discussion, and the Board chairman and the New York Bank president have also not infrequently taken divergent positions, especially on minor financing matters.[5]

Out of these negotiations finally comes an agreed program, or at least an operational basis for non-conflicting policies. On Treasury financing the final decisions are made by the Secretary of the Treasury, who may give more or less weight to Federal Reserve counsel. On credit policy the final decisions are made by the Reserve authorities, but over the past decade they have almost never diverged sharply from

[5] Between policy meetings, the Board's staff is in frequent touch with its Treasury counterpart and with the New York Reserve Bank on day-to-day market developments. Equally close operating relations prevail between the Treasury Under-Secretary or Assistant Secretary in charge of fiscal operations and the manager of the system open market account at the New York Bank. The account manager is also viewed by the Treasury as its main point of contact with the money market, since the New York Bank acts as chief fiscal agent for the Treasury as well as for the Open Market Committee; and the Treasury guards carefully from Board interference its direct relations with the New York Bank on fiscal agency money market affairs.

the Treasury position on major policy. They feel freer to do so on non-open market policy decisions that do not directly affect the prices of government securities. In such informal negotiations, the personalities of the various top officials involved have influenced substantially the nature of the negotiations and the relative strength exerted by the two agencies.

The importance of these joint Federal Reserve-Treasury discussions and decisions inevitably concentrates a high degree of Federal Reserve leadership in the major conferees, the chairman of the Board and the New York Bank president. This leadership over the past decade has been greatly strengthened by the fact that both governor Marriner Eccles at the Board and presidents George Harrison and Allan Sproul in New York have been, it is generally recognized, "strong" men who have exercised System leadership on other policies as well. Governor Eccles in particular, during his chairmanship from 1934 to 1948, made the rôle of the chairman one of strong leadership for the System.[6]

Quite aside from personality factors, however, as the chief Federal Reserve representative in dealings with the Treasury, the chairman inevitably not only serves as primary Federal Reserve official in discussions so highly complex and fluid that simple, completely prearranged positions were seldom feasible. He also serves as the primary conduit to carry back to the Reserve authorities the complex attitudes of Treasury officials on the intricate problems of debt financing and interest rate policy. In the Treasury, responsibility on important issues is necessarily narrowed down to one man, the Secretary, or at least to two, the Secretary and Undersecretary. As a practical matter, in intricate decisions involving many mutually interrelated variables a Federal Reserve Open Market Committee of twelve members, or even a Board of seven, cannot actively and equally share in discussions and "bargaining" with a single-headed Treasury. The nature of modern central banking makes almost inevitable highly centered System leadership *if* the

[6] There is no case on record in the Board's formal reports during the entire fourteen years when a policy decision was taken against Governor Eccles' vote, and in the large majority of cases votes were unanimous. His leadership in the Open Market Committee appears to have been slightly less complete, but here again there is only one policy issue on record in his twelve years as chairman on which his vote was overridden (three identical votes on the handling of short-term issues in the system account in early 1939). His leadership in both the Board and the Open Market Committee was thus exercised predominantly through informal discussion with other members rather than through obtaining formal voting majorities on issues that came to final vote in a controversial state. This situation was apparently supported by the desire to take unanimous action on policy issues whenever this was feasible, and there was undoubtedly a substantial amount of internal cross-influence before many votes were taken, in which the president of the New York Bank in particular often exerted marked influence.

As this is written, chairman Thomas McCabe has served so briefly as chairman of the Board that there is no basis for generalization beyond chairman Eccles' regime.

System is in fact to have any real influence over the supply of liquid assets and the interest rate structure.

III. *Evaluation of Present Policy-Making Procedures*

Though the legal independence of the Board from the Treasury has been complete since 1935, when the Secretary of the Treasury and Comptroller of the Currency were removed from Board membership, if anything, credit policy since 1935 has been more rather than less consonant with Treasury financing needs. In fact, the Federal Reserve has been far from "independent." The pattern and volume of Treasury financing have provided the framework for credit policy-making. It is significant that Federal Reserve influence in the direction of stronger anti-inflationary measures during the early postwar period, while apparently of appreciable importance, was exercised primarily through influencing Treasury decisions on financing, and through repeated insistence to Congress and the public on the need for more positive action to stem the inflation—*not* through direct Federal Reserve actions. Fringe measures were taken—a small increase in short-term rates, consumer credit and stock market controls, and direct suasion to discourage inflationary lending—but the Reserve authorities' repeated requests for new type reserve powers reflected their basic unwillingness under the circumstances to use their one powerful weapon —withdrawal of market support for long-term government securities.[7]

The reasons for Federal Reserve adherence to Treasury leadership in spite of the complete statutory independence of the Board are no less real and understandable because they are largely intangible. At bottom they reduce to the facts that (a) the Board is, and feels itself to be, a part of the government, (b) within the government Treasury and Federal Reserve policy are so inextricable that sharp operating conflict between them would yield a government financially divided and vulnerable to crisis and instability, and (c) in the negotiation of conflicts of view into a more or less accepted operational program, the Treasury is almost invariably the stronger of the two, basically be-

[7] The Federal Reserve appears to have drifted into the low interest policy early in the war before tightening reserves, full employment, and inflationary pressures became a major problem. The gradualness of these developments provided no vivid issue on which the decision was sharply faced. By 1942-43, the Federal Reserve authorities were advocating stronger anti-inflation measures in Treasury-Federal Reserve councils, but by this time the pattern of war finance was firmly established and the Reserve officials were unwilling to take action counter to Treasury insistence on the easy-money pattern. In the postwar period, official Federal Reserve pronouncements have suggested a schizophrenic urge to rationalize low interest rates in inflation while insisting that all the logical concomitants of low interest rates must be avoided if disaster is to be prevented. *Cf.* L. V. Chandler, "Federal Reserve Policy and Federal Debt," *Am. Econ. Rev.*, Vol. XXXIX, No. 2 (March, 1949), pp. 405-29, for a more complete account.

cause of its closer ties with the President and his executive officials but also because of its own potential powers over bank reserves.[8]

Treasury rather than Federal Reserve leadership in the resolution of conflicting views apparently arises, anomalously, in substantial part from the very "independence" with which the Board is vested. The Treasury is a crucial operating branch of the government. It is charged directly with the responsibility for borrowing any funds needed by the government. It recommends the tax policy. In his fiscal and debt policy rôles, the Secretary of the Treasury is inevitably in close contact with the White House. At least during the past fifteen years, the Secretary of the Treasury has been one of the President's closest personal confidants and advisers. This relationship is probably not accidental; by the nature of his function the Secretary of the Treasury will always be more closely associated with the President than most of the other cabinet members.

Federal Reserve stress on its "independence" from the ordinary executive branch of the government has placed it in strong contrast to the close operating responsibility of the Treasury in executive affairs. While the Board is appointed by the President and the chairman apparently serves at his will,[9] Board relations with the President have, in accordance with the intent of the law and with practical operating responsibilities, always been much less close than those of the Treasury. The Secretary of the Treasury typically saw the President on virtually a day-to-day basis during the war. The Board chairman's visits were more on the order of one or two a year. Thus in the ultimate formation of major government financial policy, the Treasury has generally

[8] Traditionally, "independent" central banks have protested strongly against Treasury borrowing from the commercial banks and the central bank itself to finance war costs, but in practice they have almost never refused accommodations. The transition from private to at least semi-public status for central banks abroad has lessened the sharpness of this conflict, and with nationalization in many countries any conflict of views is entirely within the executive branch of the government. See the account of M. A. Kriz, "Central Banking and the State Today," *Am. Econ. Rev.*, Vol. XXXVIII, No. 4 (Sept., 1948), pp. 565-80.

In the peaceful, prosperous 1920's, however, according to C. O. Hardy, there was little evidence of Federal Reserve subservience to Treasury fiscal needs (*Credit Policies of the Federal Reserve System*, Brookings Institution, 1932, Chap. XIV). In view of the very limited Treasury fiscal needs of the times and the guiding role widely accorded the gold standard, the significance of that decade's experience for the future may be somewhat limited.

[9] The exact legal status of the President's power to remove the chairman (as chairman though not as a Board member) is not clear. In Humphrey's Executor v. United States (295 U.S. 602 [1935]), the Supreme Court held that Congress could restrain the President from removal of Federal Trade Commissioners except for causes specified in the statute. The Federal Reserve Act merely states that the chairman and vice chairman are to be designated by the President for four-year terms, and contains no specific restrictions on the President's power of removal during these terms.

been in the "inner council" while the Federal Reserve has been a much less active participant.

Federal Reserve-Treasury policy conflicts have seldom been taken to the President for resolution. This again has apparently reflected in part the Federal Reserve's unwillingness to consider itself similar to the regular departments in executive responsibility to the President, and in part recognition that the Federal Reserve was seldom likely to prevail under prevailing circumstances. During part of the war, however, the process of over-all government economic policy-making was transferred in considerable part to the Office of Economic Stabilization in the Executive Office of the President. Meetings of the Economic Stabilization Board[10] considered the relative rôles of fiscal policy, credit policy, direct controls, and other measures in the war period economic scene. Fairly few Federal Reserve-Treasury conflicts on credit policy appear to have been taken to the Board, but, in general, the voice of the Federal Reserve on general economic policy appears to have been greater during than before or since that period.

Aside from the question of ultimate presidential support, the Reserve authorities are always aware of the Treasury's own potential powers over bank reserves and the need for agreement if negation of each other's policies is to be avoided. Treasury powers to reduce member bank reserves are very great, simply through permitting Treasury balances at the Reserve Banks to pile up, through the handling of its trust funds, and through Stabilization Fund operations. While the Treasury's powers to augment bank reserves are more limited,[11] they are ordinarily large in view of the large cash balances now typically maintained by the Treasury. Treasury utilization of these powers specifically to influence bank reserves would generally interfere with the normal course of its fiscal or exchange operations, and credit policy implications of Treasury fiscal management operations have ordinarily been a secondary consideration. Nevertheless, the potential Treasury use of such powers is an additional consideration impelling Federal Reserve authorities to cooperate with the Treasury to reach working agreements on credit and fiscal policy.

Lastly, if the Federal Reserve should adopt policies in active conflict with those of the Treasury and the administration, the possibility always exists that Congress may alter or abolish the present system.

[10] Composed of the director of Economic Stabilization; Secretaries of the Treasury, Commerce, and Labor; chairman of the Board of Governors of the Federal Reserve System; Director of Budget; Price Administrator; chairman of the National War Labor Board; and two representatives each of labor, management and agriculture appointed by the President.

[11] Since the Treasury can only decrease its Reserve Bank balances to the extent that it has balances on hand.

Except possibly in periods of divided Congressional-executive party responsibility, Federal Reserve insistence on exercising its legal prerogative of independence might mean insistence upon extinction. Certainly this might be the case in times of crisis, such as war. A recent off-the-record comment of the governor of one of the world's major central banks describes a situation apparently common among central banks for many years. The governor was asked, "Do you feel your bank has the right to defy the government?" "Oh, yes," he replied, "We value that right very highly—and wouldn't think of exercising it." The power of the Federal Reserve Board is enormous and its legal right to exercise the power is unchallenged. Yet as an operating matter, Federal Reserve policy has reflected keen awareness of the executive leadership of the President and the key rôle played by the Treasury in government financial affairs.

IV. *The Problem of Obtaining More Effective Policy Formation*

A. *The Place of Monetary Policy Formation*

Any practically useful consideration of monetary policy formation must rest within the framework of the government's over-all policy-making. Often "economic" policy-making is indistinguishable from "political" or "military" or "international" policy-making. Seldom are important monetary policy decisions completely independent of other governmental policy issues. The interrelationships of monetary, debt, and fiscal policy are obvious. Realistically, however, decisions within this whole area are often conditioned, or even determined, by essentially "non-economic" considerations, and there is little point in pretending that formal administrative arrangements will alter this basic political reality. For example, in 1946-47 the need for monetary-fiscal policies to restrain inflation was clear. But housing was scarce and veterans' welfare stood high in the public mind. Easy credit for home construction was monetary dynamite, especially when the basic construction limitations were shortages of labor and materials. Yet government-guaranteed housing loans at low interest rates were supported by the housing and veterans agencies and were proffered to veterans with enthusiasm. The farm price support program was a similar case in point. Most important of all, quantitatively, since the war has been the huge defense and international aid program. At this extreme, it is clear that "monetary" policy considerations are properly overridden by the need for appropriate defense and war-preventive steps. But this situation is removed only in degree from many others in day-to-day government policy-making.

Effective coordination of monetary, debt, and fiscal policy is thus only one phase of the larger problem of effective government policy

formation. Monetary-fiscal policy becomes, in important areas, merely a side result of decisions on predominantly non-monetary issues. Viewed in this light, it is more difficult than is commonly assumed to be sure whether "economic" and "monetary" considerations have been given appropriate attention in the formation of government policy. But the evidence of the past decade, at least, suggests that integration of monetary policy into government economic policy has been substantially less than satisfactory. As between the Federal Reserve and the Treasury (monetary and fiscal policy), there has been reasonably close coordination, but mainly through subservience of Federal Reserve to Treasury views. Between monetary-fiscal policy and government lending policy, there has been conflict as often as coordination during the past decade. Between the monetary-fiscal-lending area and other governmental economic policy, coordination appears to have been haphazard, with most issues decided on an *ad hoc* basis without adequate government-wide consideration of inter-agency implications of policies adopted.

As a matter of practical government, a mechanism is needed to accomplish three purposes, whether attention is focused merely on the monetary-fiscal-lending area or on the entire sweep of the government's economic policy making:

1. To assure full information on, and consideration of, the important inter-agency implications of proposed individual agency policies prior to adoption (*e.g.*, the monetary and fiscal implications of housing lending programs);
2. To facilitate compromise between the agencies concerned of as many inter-agency differences as is practicable, resulting in informally agreed-on "operational" understandings or programs; and
3. To focus up for submission to the President, and perhaps ultimately to Congress, those major inter-agency policy conflicts on which no working agreement can be reached.

In principle, the President has adequate power to establish in his Executive Office such officials and procedures as are needed to coordinate government policies on economic stabilization issues. Or he may choose to do the job himself. But, in practice, neither approach is apt to work very effectively. The President is simply too busy to be concerned with adjudication of all the inter-agency policy differences that need attention, and experience with an *ad hoc* assistant informally delegated to achieve coordination suggests that this is not an adequate answer.

There is no easy solution to this problem. Establishment of an "Economic Assistant to the President," or some comparable position equal or superior to cabinet rank, to assume the continuing responsibility

for seeing that maximum progress is made on the three scores indicated may be a partial answer.[12] Attachment of the present Council of Economic Advisers to such an official might provide a more effective tie between the Council and top operating policy formation than has so far been achieved, while maintaining a substantial degree of long-run Council planning activities relatively free from current policy-problem pressures.

In the field of monetary-fiscal-debt policy, effective, continuous consultation between the government's top monetary-fiscal and lending officials *on a roughly co-equal basis* is essential if the three practical steps toward balanced, coordinated policy-making indicated above are to be achieved. For practical purposes, assuming continuation of existing agencies, these top officials are the Secretary of the Treasury, the director of the Bureau of the Budget, the chairman of the Board of Governors of the Federal Reserve System, and one (or at most two) representative of the lending agencies.[13] These four officials, with the chairman of the Council of Economic Advisers, should be the President's chief advisers in the field of monetary-fiscal-lending policy. As close members of his official family they need to be continuously aware of each other's plans, to settle most policy issues in the area among themselves, and to focus up major differences for consideration by the President. In short, together they need to form and put into execution the government's monetary-fiscal-lending policy, subject to the President's supervision and the ultimate conditions established by Congress.

Formation of a formal, but very flexible, National Monetary Council would appear to combine the best experience of the war and postwar periods in achieving these goals. Such a council might be composed basically of the four officials just indicated, with flexibility to add others in dealing with particular issues at either the request of the President or the wish of the council members. Such a council probably should, like the National Advisory Council, be established by statute which would direct the several agencies to consult through this mechanism, toward establishment of coordinated government policy to promote high-level employment and economic stability.[14]

[12] The repeated use of such officials on a more or less *ad hoc* basis during crisis periods is evidence in support of such an approach. Recent experiences range from establishment of the powerful Directors of Economic Stabilization and of War Mobilization and Reconversion during the war, to the more informal use by President Truman of Mr. Steelman as continuing economic assistant and his recent use of Secretary Brannon to coordinate the government's anti-inflation program before Congress. Experience suggests, however, that the more *ad hoc* is the basis of such arrangements, the less satisfactory they are.

[13] Substantial consolidation of the government's now sprawling lending activities into at most three or four centralized lenders would markedly simplify this problem.

[14] Such Congressional action might take the form of amendment to provide more

It is crucial that any such council, however, should be specifically responsible to the President and should possess extensive flexibility as to its *modus operandi*. Ultimately, the chief executive must be responsible for the establishment and execution of the government's monetary-fiscal-lending policies, within the framework established by Congress. The usefulness of such a council would be to focus up and facilitate effective execution of this responsibility, not to prescribe and limit the President's handling of his duties nor to vote formal directives to the agencies involved. Excessive statutory rigidity would lead to either unnecessary inefficiencies or increased by-passing of the established formal machinery as new-type policy problems arose. Statutory status, on the other hand, would help assure continuity between administrations and would provide each incoming President with at least a framework around which economic policy-making procedures could be organized in the difficult early period of the administration. But in the last analysis, the coordinating and policy-forming rôle of any such council depends basically on its standing in the eyes of the President and Congress as the executive group responsible for the stated functions. It will "work" if it becomes an informal, integrated part of the President's official family. If it does not achieve this status, no amount of formal specifications can make it an effective coordinating mechanism at the top-executive policy level in an area of such vital importance to the President, Congress, and the nation.[15]

Establishment of such a council could not guarantee coordinated action by the monetary-fiscal-lending agencies, much less by the multitude of government agencies whose activities directly or indirectly affect the level of economic activity. There is no neat, simple road to coordination of the many government policies having conflicting economic implications, especially when the major issues involved are often in other fields. The most any formal or informal arrangements can do is to provide a maximum opportunity for well-considered, coordinated policy-making. If they guarantee that the inter-agency economic implications of important policies are fully considered prior to adoption, that the maximum pressure for coordination consistent with effective agency operations is applied, and that issues not subject to amicable compromise are effectively referred to the President, little more can be expected.

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effective implementation for the Employment Act of 1946, which has already established some mechanism in the economic stabilization policy field, both in the Council of Economic Advisers to the President and the Congressional Joint Committee on the Economic Report.

[15] A National Monetary Council might advantageously be combined with the existing National Advisory Council, which deals with international financial matters. Two members would surely be common to both councils.

B. *Role of Central Bank in Monetary Policy Formation*

The nation cannot brook a divided, obstructionist monetary-fiscal policy in crisis periods. The old concepts of central bank independence, based on a narrow view of central bank responsibilities, have been swept away by the realities of modern large-scale government financial operations in war and peace, and by recognition of government fiscal policy as a powerful countercyclical stabilization instrument. Only in periods of stability and normalcy is it realistic to conceive of congressional and administration acquiescence in central bank policies against the government's economic policies.

At bottom, it is the government's control over the money (liquid asset) supply that is at stake. Viewed in this fundamental light, the Federal Reserve's continuous responsibility to "the government," both the Congress and the President, becomes clear-cut and obvious. The real problem is how to obtain the most reasoned, deliberative judgment as to the proper exercise of the government's power over the liquid asset supply so as best to promote economic stability and government financial strength in time of crisis.

A strong case can be made for combining responsibility for the government's monetary, debt, and fiscal affairs in the Treasury. The Treasury has traditionally been associated with control of the government's power of money issue and retirement; it is now charged with executive fiscal responsibility. Complete centralized Treasury responsibility for both would guarantee a unified government monetary-fiscal policy in dealing with cyclical economic instability, war finance, and other problems. It should produce expeditious formation of policy and flexibility in dealing with crises. It should unmistakably focus responsibility through the Secretary of the Treasury to the President, who must ultimately be responsible for formation and execution of such executive-type functions as monetary and fiscal policies. Buck-passing would be far more difficult.

The case against consolidation of the fiscal and money-creating powers in the Treasury is that it may lead to too easy reliance on money creation, to too easy inflation, to too little emphasis on sound fiscal policies when they require heavy taxation and restricted government expenditures. The Treasury viewpoint, as history demonstrates vividly, will almost invariably tend toward "easy money," almost never toward *effective* monetary restriction when it comes to the action showdown. This tendency is greatly strengthened for the foreseeable future in this country by the huge outstanding national debt, whose maintenance at low interest rates and stable market prices will understandably impel Treasury preferences for easy money conditions for

many years ahead, in inflation as well as in depression.[16]

While this inclination toward monetary ease is unobjectionable in depressed periods, it precludes strong restrictive credit policies in periods of inflation, in war or peace. The dangers of excessively easy Treasury access to additional funds have been recognized for hundreds of years. They underlie the world-wide attempt during the past two centuries to check too easy government inflationary spending through establishment of "independent" central banks. But this experience has shown the unreality of the assumption that control over the money supply can or should be "outside" the government. It emphasizes that if a separate central bank is to play an effective rôle in the formation of sound monetary-fiscal policy, it must act *through* the government—through influence on the government's ultimate economic policies, not through obstruction and objection from outside.

The case for a separate central banking agency is simply that it can contribute a viewpoint in government monetary-fiscal policy formation that is specifically oriented toward the maintenance of over-all economic and financial stability. A strong argument can be made that only a separate agency, free from the Treasury's operating fiscal responsibilities, can be counted on to advance strongly the case for monetary restraint when restraint is needed. A central banking bureau of the Treasury could little hope to prevail in Treasury councils against the operational needs of large-scale fiscal policies.

What is needed is an equal hearing for the Treasury and central banking points of view in the determination of government policy, and then unified action on what policy "the government" judges best. A separate central bank can play an effective rôle only if its status is roughly equal to that of the Treasury in government monetary-fiscal councils. Its job should be to argue the case for monetary restraint when restraint is needed, regardless of the narrower debt management considerations that may dominate the Treasury thinking; to argue for monetary expansion where that is required is to mitigate instability.

[16] It should be clear that the case for a separate central bank thus rests largely on the conclusion that the Treasury will on the whole have an inflationary bias because of its operating responsibilities, and will *not* take the broader view of monetary-fiscal-debt policy that may be imputed to a central bank, freer of operating responsibilities and less susceptible to the pressures of organized groups in the economy. While this conclusion seems to me justified by the historical evidence and by the pressures foreseeably at work in the future, others may of course evaluate the evidence differently.

A strong Congressional directive to the Treasury to place commodity price and/or income stability above government security price stability in carrying out its fiscal responsibilities would lessen the need for a separate monetary agency. But even such a directive could not eliminate the fact that the Treasury's operating responsibility for raising money when needed, coupled with the inevitable human tendency to "play safe," would probably lead the Treasury always to assure overly generous financing facilities to itself through its central banking powers.

If Federal Reserve-Treasury compromise between equals proves impossible, the issue should be referred for informal adjudication to the proposed National Monetary Council or ultimately to the President himself. But once a government policy is determined, active obstructionist action by the central bank would be disruptive and untenable. Only the right to raise crucial issues directly with Congress should remain, and it is well to recognize clearly that this could be exercised *only on very rare occasions* if any effective Federal Reserve rôle in government executive policy councils were to be maintained.

The meaningful choice thus lies between (a) consolidation of monetary-fiscal functions in the Treasury and (b) establishment of a more important, responsible rôle for a separate Federal Reserve. The present arrangement provides the advantages of neither alternative and the disadvantages of both. On balance, the duality and inefficiencies of separate Treasury and Federal Reserve organizations appear to me to be justified by the advantages of maintaining in the government an independent credit policy viewpoint.[17] But the greater Federal Reserve "independence" *from the Treasury* should be established and protected if a separate central bank is to be maintained, and steps should be taken to implement the rôle envisaged for the central bank in government policy formation.

This reasoning suggests that the potential contribution of a separate central bank could be best obtained by:

1. Utilization of some sort of National Monetary Council upon which the Treasury and the Federal Reserve would sit *with equal voice;* and
2. Increased responsibility of the Federal Reserve to the President as one active major participant in the formation of executive branch economic policy. Further means for achieving this result are considered below.

Marked improvement might be obtained additionally or alternatively by making the Federal Reserve specifically responsible for all debt management. Thus the Treasury might borrow only, or largely, (at least during time of peace) from the Federal Reserve, and the Federal Reserve would have the power to issue and deal in its own securities vis-à-vis the banks and the public. Coupled with adoption of a security reserve plan to restore Federal Reserve control over commercial bank deposits, this plan might both restore the effectiveness of monetary controls and concentrate responsibility for monetary-debt policy in one agency so as to minimize simultaneously the opportunities for

[17] Though *effective* use of the President's Council of Economic Advisers to represent a non-operating monetary-fiscal viewpoint in governmental policy councils would substantially weaken the case for a separate Federal Reserve.

buck-passing, the chances of divided policy, and Federal Reserve-Treasury friction. Full exploration of this rather drastic reallocation of powers and responsibilities is beyond the scope of this paper; it may merit fuller investigation.[18]

C. *Internal Federal Reserve Organization for Policy-Making*

Experience suggests four important changes in the internal structure of the Federal Reserve to promote more effective participation in government policy formation.

1. Responsibility for all Federal Reserve policy formation should be concentrated in the Board of Governors. The present split responsibility between the Board and Open Market Committee attempts to divide what is indivisible in any meaningful view of monetary policy-making; it breeds friction; and it specifies a policy-making body unrealistically large for the type of work it must do to be effective. Concentration of all policy responsibility in the Board, coupled with a statutory requirement for periodic full consultation on system policy with the twelve Reserve Bank presidents, would vest responsibility for the nation's money supply in a specifically public body, appointed by the President with the approval of the Senate, while protecting adequately the broad regional interests which the regional system was aimed to safeguard. Monetary policy must be national and public in character; it has no room for regionalism or for special interests.

2. The Board should be decreased in size to three members, with six-year terms expiring at two-year intervals. This would decrease the likelihood of a continuing major policy difference between the Board and the president, yet retain the maximum quasi-judicial independence compatible with effective participation in government policy-making. A smaller Board would be in keeping with the realities of Federal Reserve relations vis-à-vis the Treasury, and it should provide a more efficient mechanism for internal policy-making. It would increase the attractiveness of Board appointments to outstanding men, who will seldom long be satisfied with membership on such a Board unless active participation in policy-making is involved. Yet in combination with a requirement of full consultation with the twelve Reserve Bank presidents on policy issues, it would protect adequately the deliberative

[18] A similar arrangement is suggested by Professor A. G. Hart, in "Monetary Policy for Income Stabilization" a forthcoming volume of the Yale University Committee on National Policy. Professor Jacob Viner urged as long ago as 1936 ("Recent Legislation and the Banking Situation," *American Economic Review, Proceedings,* March 1936, p. 118) that the Federal Reserve should be permitted to deal with the market in its own securities, though he did not propose the further step of Treasury borrowing solely or primarily from the Reserve. Viner's suggestion was merely to give the Reserve a power already possessed by many other central banks.

quality of Federal Reserve policy-making. If the need for a Board is not dominant, a good case can be made for a single executive head for the Federal Reserve, subject to the consultation requirements noted. Certainly, as a practical matter the board form is less effective in policy deliberations than might be superficially expected, and the policy contributions of many Board members have apparently been negligible during Federal Reserve history to date.

3. The Board chairman should specifically serve as chairman at the will of the President. Formal isolation of the chief Federal Reserve official from the President's official family is unrealistic and outdated. It only serves as a barrier to the "independent" force which the Federal Reserve is expected to exert on government monetary-fiscal policy formation.

4. Federal Reserve power to prescribe reserve requirements against deposits should be extended to all insured banks. This is clearly within the power of Congress, and is within the spirit of the existing F.D.I.C. Act which prescribes federal surveillance of all insured banks.

These administrative changes omit perhaps the most crucial consideration of all for effective monetary policy formation and participation in general government policy-making—that of obtaining and retaining top-calibre men. With outstanding leaders, the Federal Reserve will play a useful, influential rôle in government policy formation. Without them it will not, whatever formal administrative arrangements prevail. The goal of making Board membership more attractive to such men should bulk large in any consideration of potential statutory change; it is implied in the steps suggested above. To these most important inducements of increased responsibility and policy participation could be added higher salaries and freedom from the present special interest requirements that prescribe regional and economic group qualifications for Board members.

MEMORANDUM ON THE STABILITY OF DEMAND DEPOSITS

By C. R. WHITTLESEY*

What Mr. Hawtrey described as the "inherent instability of bank credit" has long held a central position in discussions of the commercial banking process; it is sometimes made to appear as the predominant characteristic of banking and even of the monetary system as a whole. The tendency for operations of the commercial banking system to produce inflationary effects in periods of inflation and deflationary effects in periods of deflation has been an integral part of the so-called monetary theory of the business cycle. Measures for combatting the tendency for deposits to expand or contract unduly have come to occupy an increasingly important place in central banking; indeed, the essential function of a central bank is said to be the creation and absorption of reserves for the purpose of promoting economic stability.[1]

The effect of changes in the character of bank assets has been to alter the basis on which the alleged instability of bank credit rests. It must, therefore, be assumed that the phenomenon itself has been greatly modified. To say, for example, that a severe contraction of the volume of demand deposits (comparable, for example, with that which occurred in 1929-33) is no longer possible is less a forecast of the future than a corollary of developments which have already taken place. The passing of the "inherent instability of bank credit," certainly as the concept has customarily been understood, is of more than theoretical consequence. In view of the conspicuous place the concept has occupied in discussions of business cycles and central banking policy, the conclusion has important practical implications as well.

Instability of Bank Credit, Past and Present

The theoretical explanation of the "inherent instability of bank credit" is essentially as follows. Creation of demand deposits is assumed to result from the granting of loans and discounts by commercial banks. The volume of loans and discounts will presumably vary with

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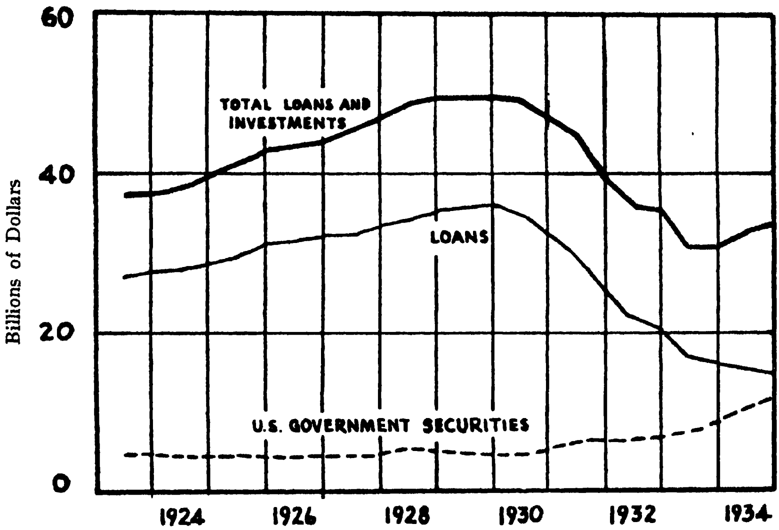
[1] Board of Governors of the Federal Reserve System, *Banking Studies* (Washington, 1941), pp. 17-18.

the dollar volume of business. Rising prices and increasing business activity will lead, therefore, to an expanding volume of bank deposits. The expansion of bank deposits, in turn, will contribute toward a continuation of the upward movement of the dollar volume of business. This combination of relationships provides all the elements of a continuing upward spiral. Conversely, falling prices and business activity will result in a contraction of loans and discounts, the calling of past loans, and in the end a contraction of demand deposits. The resulting destruction of circulating medium will contribute to a further down-

CHART I.—COMMERCIAL BANK LOANS AND U.S. GOVERNMENT SECURITIES, 1923-1934



Source: *Federal Reserve Charts,* December 1948, p. 11.

ward movement. Such a combination, on conventional quantity theory reasoning, provides the basis for a continuing downward spiral of prices and business activity.[2] The substance of this analysis is that bank credit is not only inherently unstable, but is unstable in a manner both sympathetic with and conducive to swings of the business cycle.

The connecting link in this description of the inherent instability of bank credit is the granting of loans and discounts by commercial banks. Accordingly, it is the diminished relative importance of commercial paper, or more specifically, the changed relationship between loans and government securities[3] in the portfolios of commercial banks that pro-

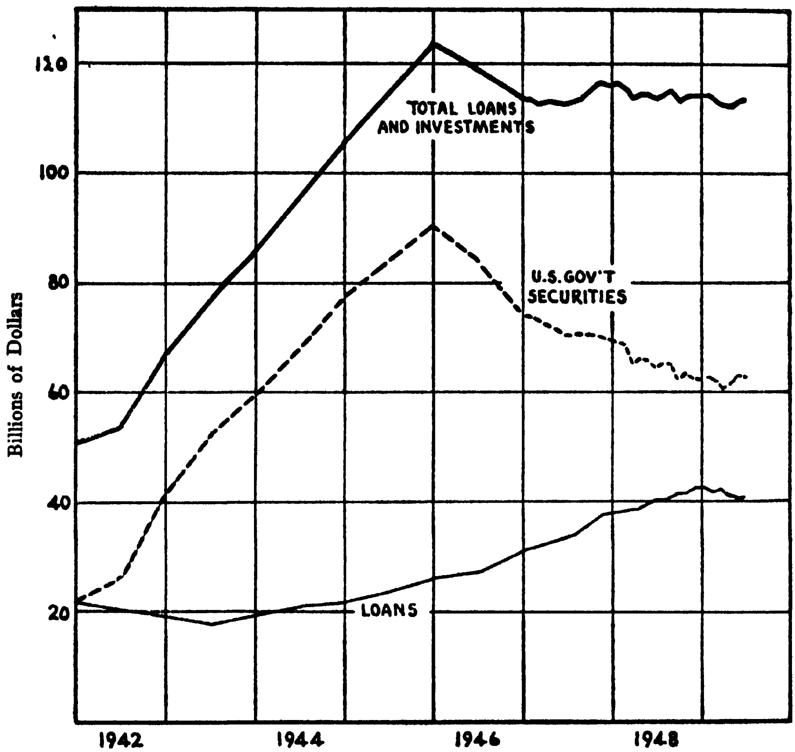
[2] *Cf.* the remark that ". . . prices, released from any physical standard of value, would vary without limit." R. G. Hawtrey, *Currency and Credit* (London, Longmans, 1928), p. 14.

[3] The term government securities as used here refers to Treasury obligations only.

vides the principal reason for believing that bank deposits will no longer behave in an inherently unstable manner.

Throughout the 20's and the early 30's loans constituted the principal element in the earning assets of commercial banks (Chart I). The predominance of loans explains why what happened to the volume of loans was looked upon as determining what happened to the total

CHART II.—COMMERCIAL BANK LOANS AND U.S. GOVERNMENT SECURITIES, 1942-1949



Source: *Federal Reserve Charts*, August 1949, p. 9.

of demand deposits. In the decade of the 40's the relationship between loans and government securities in the portfolios of commercial banks came to be the reverse of what it was 20 years earlier. Today the principal element, quantitatively, among the earning assets of banks is government securities (Chart II). Thus, it would be consistent to argue that changes in their volume will tend to determine the movement of demand deposits. Or to the extent that they prove less volatile than loans, their relative stability would tend to moderate the effect of changes in the volume of loans. Since the volume of government securi-

ties held by commercial banks cannot be expected to behave in the manner that characterized holdings of loans and discounts, it would seem to follow that instability in the volume of deposits such as prevailed in the past can no longer be anticipated. Instability might conceivably occur, but it would not be instability of the former type. This conclusion is of substantial consequence, but it is possible to go much further than so negative a statement. Not only does it appear certain that the volume of bank deposits will no longer behave in the traditionally unstable manner;[4] it is possible to argue that the volume of deposits can be expected in the future to behave in a relatively stable, and perhaps even stabilizing, manner.

At the end of 1945, government securities constituted nearly three-fourths of the earning assets of commercial banks. Even with the decline in bank holdings of governments and the growth of loans which occurred after the end of the war, Treasury obligations represented over 55 per cent of earning assets at the end of 1948 compared with only 10 per cent in June 1929.[5] Not only is there no reason to expect the volume of these assets to rise and fall in sympathy with major changes in business conditions; there are historical as well as logical reasons for expecting them to move in the opposite manner. Historically, it may be noted that between 1929 and 1933, when the volume of commercial bank loans fell sharply from 35.7 billion dollars in June 1929 to 16.3 billion in June 1933, commercial bank holdings of United States government securities increased from 4.9 billion dollars to 7.5 billion (see also Chart I). At that time the proportion of governments was too small for the growth in their volume to exert a dominating influence on deposits. One may ask what would have been the effect on deposits if governments had constituted as large a proportion of total earning assets as they do today. If it could be assumed that the same tendencies would have prevailed with respect to changes in holdings of governments and non-governments including loans and that only the proportions were different, the total of deposits, instead of declining sharply as they did from 49 billion dollars to 31.9 billion, would have increased.[6] The same general pattern of behavior was exhibited still more recently when the volume of government securities held by commercial banks declined substantially with expanding business and rising prices from 1945 to the middle of 1948. The earlier and sharper part of this decline is accounted for largely by the drawing down of

[4] That is, sympathetic with and conducive to swings in the business cycle.

[5] The question of possible fluctuations in the relatively smaller but still substantial volume of loans is examined below.

[6] Since this is a purely hypothetical comparison, no attempt is made at refinement to limit the comparison to demand deposits, to eliminate interbank deposits and the like.

swollen Treasury deposits, but the decline continued in 1947-48 with no significant pressure from this source. Bank loans, on the other hand, followed the opposite course during the same periods.

Without suggesting that the correlation is perfect, it appears that historical evidence in these years, as also in the period 1919-22, supports fairly well the view that bank holdings of governments may move contrary to bank loans during major fluctuations in business activity. It would be unwise, however, to push the argument very far on historical evidence, inasmuch as the period since banks became important holders of Treasury obligations is short and has been influenced by various highly irregular factors.[7] More convincing support is to be derived from deductive analysis.

The logical explanation of the difference to be anticipated in the behavior of bank holdings of governments and of loans is primarily that the total volume of loans and discounts is functionally related to the dollar volume of production and trade while the total of government debt outstanding tends, wars to one side, to increase in bad times and decline in good for budgetary reasons. It does not follow, of course, that the amounts of each type of asset held by banks will vary directly with their respective totals. Nevertheless, the totals are at least significant as influencing the supply available for purchase by banks.

A tendency for the amounts held by banks to vary, generally speaking, in the same direction as the totals of loans and governments outstanding is further strengthened by the consideration given to the relative quality of loans and Treasury obligations in different stages of the cycle. With a worsening of business conditions, banks not only call old loans and scan new loans more closely but in the past they have been forced by the supervisory authorities to adopt a more restrictive lending policy at such a time.[8] The adherence by bank supervisors and Federal Reserve officials to relatively strict policies in the early 30's in pursuance of what they regarded as the sound principles of commercial banking and the gold standard is well known.[9] While a negative attitude toward loans during a depression will presumably be less strong in the future, it cannot be supposed to have disappeared altogether. Holdings of government securities by banks, on the other hand, are wholly safe from criticism by supervisory authorities; on this point there appears to be complete agreement among

[7] For example, the attitude of supervisory authorities, changes in reserve requirements, uncertainty with respect to interest rates, etc.

[8] The 1938 ruling on bank examinations may be assumed to have relaxed somewhat the tendency toward greater stringency of loan procedure in bad times.

[9] Compare also Homer Jones, "Rules and Procedures in Bank Examinations," *Jour. Pol. Econ.*, Vol. XLVIII, No. 2 (Apr., 1940), pp. 183-98.

officials and bankers alike. The disposition of bankers to shift to Treasury obligations in times of growing uncertainty because of the high quality of these securities[10] is therefore reinforced by the fact that they are able to do so without risking the future displeasure of examiners.[11]

The foregoing observations are sufficient by themselves to suggest that with the present high proportion of government securities in bank portfolios the basis of the "inherent instability of bank credit" has been fundamentally modified. This is not to say that instability of bank credit has become inconceivable,[12] but rather that such instability is scarcely "inherent" (certainly not for the same reasons) and that it cannot be expected to conform to the conventional pattern.

It is to be observed further that even within the much narrower ratio of total earning assets which loans now occupy in bank portfolios (38 per cent of combined loans and investments of all commercial banks at the end of 1948 against 72 per cent in the middle of 1929[13]) loans can hardly be expected to display as great a degree of instability as characterized their behavior in the past. The fact that the volume of bank loans doubled between 1944 and 1948 might seem to suggest that they are as unstable as ever, but it is significant that the loan portfolio differs from that of the past, not only in relative magnitude but also in the character of the loans themselves. Today, loans of commercial banks include a substantial volume of term loans, real estate loans, and consumer loans. The contractual maturity on loans of these types, consumer loans included, is much longer than that on loans of the types which predominated in the past. Because of these differences, they are not subject to automatic contraction to the extent that was possible earlier, nor is it possible for the banks or the authorities to force a contraction of loans to the degree that they could in the 30's.

[10] This statement may seem to underestimate the effect of differences in interest rates. It reflects, first, a conviction that regard for quality may often be more important than rate of return in the decisions of bankers and, secondly, a recognition of the possibility of adjusting return on investments, within fairly broad limits, by modifying their maturity distribution.

[11] The great influence exerted on the action of bankers by the indicated or anticipated wishes of examiners has not been sufficiently recognized by students of banking.

[12] Any attempt to analyze the character of the instability that might arise with the present composition of bank portfolios would require assumptions concerning interest rate patterns, official support of the security market and attitudes on the part of bankers and supervisory officials into which it is not possible to enter here. The most reasonable expectation—as is perhaps sufficiently indicated in the text—is that, compared with the past, a high degree of stability of bank credit is more probable than a corresponding degree of instability.

[13] No attempt is made here to discuss investments other than Treasury obligations. It is probable that separate consideration of them would strengthen the argument rather than otherwise.

Loans to brokers and dealers and loans on securities, both of which are subject to severe contraction in a falling market, represented a large volume of bank assets in 1929 but are negligible today. In view of these various changes within the loan portfolio, bank loans can no longer be expected to undergo as great contraction, spontaneous or induced, as characterized major depression periods in the past.

A final factor contributing to the stability of deposits is that cash assets, including legal reserves, represent a higher proportion of deposits today than formerly. Indeed, the mere fact that banks are now subject to roughly double the reserve requirements that prevailed before 1936 means that the multiple of deposit expansion—upon which, after all, the "inherent instability of credit" fundamentally rests—is about half what it used to be.

Relation of Deposit Stability to Cycle Analysis

The probable tendency for holding of government securities to counteract to some extent changes in the volume of loans and discounts in bank portfolios and, therefore, to promote the stability of bank deposits has been noted. Even on the conservative assumption that holdings of government did not change and that loans and discounts were as unstable as ever, the *relative* change in deposits would be considerably less than in the past. This follows from the fact that loans and discounts are so much smaller a proportion of the total assets of banks. The effect of such changes as may still be induced by variations in the loan portfolio will be modified by the fact that the total volume of circulating medium is now so large. The present situation resembles that which once applied with respect to the gold standard when the existence of a large stock of gold prevented annual additions to the supply from having a material effect on the value of gold.

The probability that increased stability of demand deposits will contribute to more stable price levels and business activity is suggested by familiar quantity theory reasoning. The possibility that greater stability in the volume of deposits will tend to reduce variations in the rate of turnover of deposits is likewise familiar. The reasoning is simply that a change in the volume of money, by causing a rise or fall in prices (again on quantity theory grounds), contributes to a speeding up or retardation of velocity in anticipation of further changes in the price level. In other terms, it alters the speculative motive for liquidity preference. However it is described, such changes in the rate of turnover would be lessened, presumably, by greater stability of the money supply.

Less widely recognized is the stabilizing effect on economic activity which tends to result automatically from changes in the level of prices

under conditions of a constant money supply. It has been pointed out that with a rise in the quantity of money relative to the volume of transactions, there must be either higher prices or greater liquidity.[14] It can also be said that with falling prices and a relatively stable money supply there is an increase in liquidity.

In simplest terms, every decline in prices is an increase in the purchasing power of the dollar; if the number of dollars remain constant, the total money supply constitutes a larger sum of available purchasing power. With a stable money supply, rising prices reduce and falling prices increase total purchasing power in the hands of holders of money, meaning by total purchasing power the sum of goods and services which their money collectively represents. Total effective demand—that is, what actually *is* bought—does not necessarily increase with falling prices since rate of use of money may conceivably decline by enough to offset the increase in the goods equivalent of money. But potential demand—what *can be* bought at the velocity prevailing previously—necessarily does expand with falling prices and a constant money supply. Moreover, the probability that this potentially stabilizing influence will be defeated by a decrease in velocity should be less, as was previously noted, with a constant than with a contracting money supply.[15]

To the effect which falling prices may have on the community's liquidity through the money supply must be added the similar effect they may have on "near-money" and other types of liquid assets. The purchasing power represented by holdings of time deposits, war savings bonds, and other government obligations likewise increases, dollar for dollar, with a fall in the price level. In the past the volume of non-cash liquid assets was likely to decline with falling prices, and to the extent that they were in the form of obligations other than of the Treasury their quality was also likely to deteriorate. For both reasons the sum total of liquidity represented by non-cash assets, far from increasing, was almost certain to diminish in times of falling prices and worsening business conditions. In the case of the liquid assets for which the United States government is directly or indirectly responsible, this will no longer be true. For a significant segment of the assets, moreover, the Federal Reserve Banks provide an added source of liquidity.

[14] See my *Principles and Practices of Money and Banking* (New York, Macmillan, 1948), pp. 423-24.

[15] In alternative terminology, a change in prices alters the amount of money that has to be held to satisfy the transactions motive for liquidity. With a constant money supply, this exerts a stabilizing tendency on the price level, except as the tendency is offset by a contrary effect on the speculative or precautionary motive. The possibility of an offsetting effect would still exist, but presumably would be less strong than where the volume of deposits was also changing.

Thus we now have, in addition to a large and stable money supply, a large volume of other liquid assets whose liquidity seems assured.

If, then, the total volume of money and other liquid assets remain approximately constant, rising or falling prices produce an automatic stabilizing potentiality through reducing or increasing the sum total of purchasing power which these assets represent. The importance to be attached to this factor does not rest on acceptance of the view that the total of these assets will be completely stable. The same consideration applies in whatever degree the volume of money and other liquid assets is less unstable than in the past.

One of the principal contributions of Keynesian economics was to emphasize the effect of falling prices, including wages, on income and therefore on the chief source out of which expenditures could be made. While this line of reasoning stressed that "every level of production is potentially self-financing," it served to discredit the view that recovery could be achieved through the sort of price and wage reduction favored by those who advocate achieving adjustments by means of price flexibility.[16]

The logical conclusion from what has just been said about the importance of a constant money supply is that in the future the tacit classical assumption of a more or less constant total demand may become rather more realistic. Because of the size of liquid assets and their probable greater stability, it can no longer be assumed with the former certainty that falling commodity prices and wages will correspondingly reduce total spending. To an extent that was never possible in the past, a reduction in spending out of income may, conceivably, be compensated by an increase in spending out of liquid balances. We now have a situation, therefore, where the classical assumption of an elastic demand with falling commodity prices and wages might tend to hold true.

Translated into more concrete terms, this means that in a period of falling prices the community, as a whole, including businesses and individual consumers, may experience little or no shrinkage in the size of liquid balances. While the balances may be shifted about, the bulk of them, probably, will continue to exist somewhere in the economy: most of the money and near-money will still be present. Individuals and businesses which were holding working balances and balances for some particular use in the future are not likely to find these

[16] There has frequently been a tendency to relate total effective demand too exclusively to income, and to disregard the possible relation of liquid balances to anticipations, investment and the consumption function. This sort of "crude" Keynesianism is suggestive of the crude quantity theory reasoning which characterized an earlier stage of monetary thinking.

balances vanishing before their eyes to the same extent as happened, say, after 1929. There would seem to be a greater probability, therefore, that they will employ these balances for their intended purposes.

While the possibility, based on past experience, of a further decline in prices would still tend to discourage buying at current levels, the inclination to spend at each new low level would hardly be checked to the extent that it formerly was when the size of the public's cash balances was going down along with prices. The potentiality of sustained spending is not, of course, the same as the actuality. Even the potentiality constitutes a significant difference compared with the past, but in addition the potentiality not only permits but tends to produce the actuality: to whatever extent the potentiality is exercised it helps to check the decline, contradict pessimistic anticipations and induce optimistic anticipations. On the other hand, to the extent that the potentiality of increased purchasing is not exercised and the decline in prices continues, the greater is the rise in real value, *i.e.*, in potential purchasing power, of liquid balances and the greater the magnitude of the demand that can result from this source when spending is finally renewed.[17]

Implications for Monetary Policies

No one would insist that the present monetary outlook is altogether reassuring. The ability of member banks to convert a large proportion of their assets into reserves more or less at will may appear, for example, to constitute a danger of serious credit expansion. For those who still retain confidence in interest and discount rates as regulators of the volume of credit, moreover, efforts to maintain relatively stable interest rates may suggest resulting instability elsewhere. Whatever instability in the volume of credit may exist in the future will rest, however, on a different basis from that which gave rise to the concept of the "inherent instability of bank credit."

The different basis of possible instability of bank credit implies that monetary policy in the future must be of a different character from what it was in the past. The probability that future fluctuations in the volume of bank deposits will be smaller carries the further implication that monetary policy as we have known it will be less important than in the past, if for no other reason than that monetary policy has traditionally been directed primarily toward influencing the volume of circulating medium. Greater stability in the supply of money implies, in so far as the quantity theory has any validity at all, a more stable level of

[17] The foregoing discussion is still based on the assumption that the total of money and near-money remains nearly constant. The reasoning applies partially, however, as long as the total is less unstable than in the past.

prices. Such changes in prices as do occur may tend to be associated more closely with changes in the rate of use of money and less closely with the total volume of money. This also would have policy implications, as will be noted presently.

To the extent that the volume of circulating medium maintains greater stability than in the past, it would seem to follow that the reduced effectiveness of the familiar instruments of Federal Reserve credit control is likely to be less serious than is now currently assumed. This would not be because the loss of effectiveness is less than has been alleged or because changes are to be anticipated which will restore their potency.[18] It would be because these instruments of credit control are primarily devices for influencing the quantity of money, and the quantity of money had become a less volatile factor.

Assuming that the foregoing interpretation is correct and the total supply of circulating medium maintains a relatively high degree of stability compared with the past, it would seem that monetary policies of the future must be directed more to the use of money and less than heretofore to quantity. Selective credit controls are free of many of the shortcomings that attach to the more traditional instruments of policy and may be expected to assume greater importance. While they have their quantitative aspects, their focus is on non-monetary rather than monetary forms of credit. Moral suasion and other psychological methods of influencing business would be likely to experience greater development, along with new methods yet to be discovered. The vacuum left by the declining importance of monetary control would still further direct attention toward the use of fiscal policies, which are uniquely adapted to influencing the behavior rather than the quantity of money. Those who fear the rising importance of fiscal policy must

[18] Mr. Randolph Burgess is authority for the statement that the principal effect of changes in the discount rate was psychological: "The most powerful influence of a rate change is . . . psychological. . . . The rate change was a pronouncement by well-informed men concerning the credit situation made at a time when a change in direction of movement was ready to occur or was in process due to other causes." *The Federal Reserve Banks and the Money Market* (New York, Harper, 1936), p. 230. According to this view a change in the discount rate was a form of sign language by which the Federal Reserve indicated its judgment concerning economic conditions. To say, as Mr. Burgess has elsewhere done (National Debt Series No. 7, Committee on Public Debt Policy [New York, 1948], p. 10), that loss of the discount weapon seriously interferes with the ability of the Federal Reserve Banks to control credit is to imply that there is no other way by which the Reserve authorities can satisfactorily indicate their opinion concerning the state of economic activity. Needless to say, I believe the first point of view is valid but not the second. With respect to the future, it is to be noted that the loss of Federal Reserve control over member bank reserves occurred when interest rates rose in 1947-48 to the ceilings set by the Federal Reserve (prices of governments fell to the support levels). For reasons that should have been apparent at the time, this movement was temporary; with the rise in prices of governments above the support levels (decline in interest rates), the condition of extreme weakness was largely overcome.

draw what encouragement they can from the hope that, with a more stable volume of money, business fluctuations will be more moderate and, therefore, there will be less occasion for fiscal and other policies for influencing business activity!

Greater stability of the money supply should tend to cut the ground from under the principal criticisms of the financial system and the leading proposals for financial reform. The "inherent instability of bank credit" was the basis of the chief attacks on the banking system. To the extent that it was regarded as a cause of cyclical fluctuations, it was the basis of some of the most persistent criticisms of the entire free enterprise system. Many of the plans for banking and monetary reform which bankers have found most objectionable, such as Fisher's 100 Per Cent Reserve Plan and the recent proposal advanced by the Federal Reserve Board for a special security reserve, are pointed directly against the traditional instability of bank credit.[19]

Amelioration of the inherent instability of bank credit and the emergence of a large and probably more constant volume of money and near-money are legacies of the Great Depression and the Second World War. It is a curious thought that two such great disturbances may have contributed substantially to the future stability of the monetary mechanism and even, perhaps, of the general level of economic activity. Basic to this potential stability of the money supply is the size and distribution of the federal debt. Thus it may turn out that the national debt, whose growth filled the financial community with continuing dismay, will have become a bulwark of its strength and stability.

[19] The immediate purpose of the security reserve proposal, of course, was to limit the power of member banks to force the Reserve Banks to create reserves.

THEORY OF THE FIRM: SOME SUGGESTIONS FOR REVISION

By W W. COOPER*

To date the formal theory of the firm as presented, say, in most economic textbooks has successfully withstood various complaints and criticisms. Whatever sympathy we may tacitly feel concerning the validity of some of these complaints, the general feeling seems to be that this theoretical apparatus forms an indispensable tool for economic analysis. Without it (or some variant) the economist has no tools supplied from his discipline and is forced to rely instead on whatever judgment or insight he individually may possess.

One of the more serious charges that can be leveled against this theory concerns the rich variety of problems that preoccupation with this mechanism has excluded from the purview of the theorist. He has, perhaps, been somewhat too hasty in brushing aside fairly common patterns of business behavior as irrationality, frictions, or other categorizations. The following item from the *Wall Street Journal*[1] discussing recent price behavior of canned and frozen foods furnishes a case in point:

> Four boom years of record farm income have buttressed the bargaining position of growers. Often in prewar, pressure from bankers to pay off notes frequently forced them to settle for prices below their wishes. Today they enjoy unprecedented financial independence.
>
> Canners are reluctant to pay the prices the growers ask (in the face of large surpluses of canned and frozen foods); so the contracting for crops lags. A cannery association spokesman says: "Everybody is playing it cagey—holding back, sitting down and taking a look at inventories around the country, and waiting for the other fellow to make the first move."

Explanation of such behavior patterns is awkward within the confines of strict profit maximization. The all consuming category of uncertainty may be brought into play, but even this analysis becomes labored when it is noted that similar production conditions and price uncer-

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[1] Vol. CXXIX, No. 31, Thursday, February 6, 1947, p. 1. See also Vol. CXXVIII, No. 119, Monday, November 18, p. 1.

tainties have at times produced opposite results. (One of the difficulties of uncertainty theory as applied to the firm is that we have no effective measuring instrument.) A case might be made, it would seem, for analyzing the effect of the cash position of these "firms." In particular, a case might be made for analyzing the relation between cash position[2] and control retention—or, more generally, between liquidity, profit, and control.

The problem of control retention may be divided into two parts, what might be called the "inside" and the "outside" problems.[3] In the first direction lies the task of formulating an adequate theory for describing the behavior of agents appointed by the entrepreneur and subjected to specific control mechanisms.[4] In the second direction lies the province of top management. Since the first problem will be dealt with at greater length in a subsequent article, attention will be here devoted primarily to the second.

One of the characteristics that distinguishes top- from lower-echelon management is the problem of administering the equity accounts[5]—

[2] Various measures of cash, or liquidity, position might be adopted such as absolute cash position, quick ratios, current ratios, etc.

Such analyses might also throw considerable light on oligopoly behavior and the conditions under which "discipline" can be maintained. It seems reasonable to expect that when cash position has deteriorated to where control of the individual firm by the entrepreneur is imperiled, quite different behavior patterns may emerge than when cash position and control retention are "secure."

[3] The problem of terminology is difficult. Since the words *micro* and *macro* have already been drawn into economics with specific meanings, the terms "atomistic" and "subatomistic" ayers of the firm's operations might be used to describe the distinction drawn above.

[4] It is surprising, for example, how high one can go in the official hierarchy of many large organizations without being able to locate persons who are familiar with the prices of factors and/or products with which they are dealing. I have elsewhere argued for the need for an approach to economics as an aspect of administration, including the problems of delegation and control. In a complex operation it is fairly common for even top management (including the entrepreneur) to know neither costs nor prices of particular commodities or orders. I hope to discuss the techniques of cost control in a subsequent article. As for prices, it is necessary to distinguish between specific pricing of the kind generally posited by theory, and a price policy for general commodity lines—*e.g.*, "meet the market," "lead the market," "follow the leader," "cost plus," etc. Top management frequently confines itself to over-all policy formation and review.

A vivid illustration of what is involved has recently been drawn to my attention involving a large, nationally famous corporation which is generally regarded as something of a model of efficient business administration: The board of directors was convened to consider raising prices—*i.e.*, changing the policy—over a wide variety of lines. Preparatory to the decision, certain subordinates had calculated price indices for the first time in the company's history. As a result of these calculations, it was discovered—because of delays between new orders and billings—an automatic price increase of considerable magnitude had already come into effect. Since the company would thus receive many millions of dollars in revenues that had not been expected and the anticipated losses would automatically disappear, the proposal to "increase prices" was abandoned.

[5] *I.e.*, both liabilities and net worth, including the problem of dividend declarations—a problem, it should be noted, about which contemporary theory is almost entirely silent.

The following quotation from Edwin L. Cady, *Industrial Purchasing* (New York, John Wiley

of so arranging the corporation's assets as to be able to meet impending claims and avoiding bankruptcy.[6] Down-the-line management has virtually no contact with these problems. Neither "meeting next Thursday's pay roll" nor arranging financing is their immediate concern.[7]

& Sons, Inc., 1945) p. 171, is of interest in its discussion of division of responsibility between the purchasing agent and top management:

"Cash positions of companies make big differences. During business depressions as many as 90 per cent [sic] of all companies may find it hard to meet their weekly payrolls. If this is the case, inventories must be kept low no matter what the advantages of using them, unless the bankers will lend the company money with the inventory as collateral, or the company can borrow on some other basis so the payrolls can be met.

"Because of these (and other) factors . . . the control of inventory is seldom completely in the hands of the purchasing agent. Usually this is a subject for the financial management of the company including the president and the treasurer . . . ."

[6] Not only in the equity and statutory sense, but including quasi as well as legal reorganization. Again it should be noted that theory has been almost entirely silent on this important subject. (There is, of course, the notion of economic failure, but as N. S. Buchanan notes in "The Economics of Corporate Reorganization," *Quart. Jour. Econ.*, Vol. LIV, No. 1, p. 29, "An examination of the theoretical literature in economics reveals that writers have apparently not thought it necessary to define 'failure' and rarely even employ the term . . . .")

Lack of theoretical analyses of bankruptcies and insolvency is surprising not only because bankruptcies represent an important imperfection but also because they tend to happen under circumstances and at "rates" (at phases of the cycle) which admit of "rationalized" solutions—both in the strict and broad sense of that term.

[7] In economics, neither cash nor accrual concepts are ordinarily distinguished. As for profit maximization, it is difficult to discover by reference to economic literature whether it is rate of return on net worth, on cost, on sales, etc., which is being maximized. Throughout this article, it is profit in the accrual sense that will be utilized.

The above comments suggest the possibility of analyzing factor substitutions in terms not only of price but also cash flexibility. Labor, for example, whatever its price flexibility may be, is notoriously unyielding in terms of cash demands. Bondholders and stockholders, on the other hand, have often conceded short-run cash for the prospect of long-run price increases for their services. The following quotation from an article, "Union Responsibility Based on Information," *Labor's Monthly Survey*, Vol. 9, No. 11, p. 6, prepared by the American Federation of Labor instructing its members on the use of financial statements is of interest in this connection:

" . . . Most of its [the specimen company being analyzed] working capital is in inventories and accounts receivable, and it must count on selling its products quickly and collecting its bills promptly in order to meet its obligations. This means that if a large new order came in, the company might be pinched for cash to buy materials and hire more workers. Worse yet, if business dropped off and inventories sold more slowly the company might be short of cash, and in this case its first move might be to lay off workers. Adequate working capital helps to make workers' jobs more secure."

The company selected by the union for analysis is indulging in overtrading, as judged by the ratios of net sales to tangible net worth and net sales to net working capital. *Cf.* Roy A. Foulke, *Practical Financial Statement Analysis* (New York, McGraw-Hill, 1945), Chaps. XIV and XV. Should the company grant the recommended wage increase, serious impairment of its cash position would result from the reduction in government equity through the draw-down in accrued taxes. The union notes, in fact rests a large part of its case, on the tax reduction charged to profit and loss but does not project this effect into the balance sheet. Marked instability upon the occurrence of unforeseen factors is, of course, characteristic of companies engaged in overtrading—frequently highly profitable companies—and is what makes financial analysts cautious in approaching them. In view of the subject of this paper it is worth quoting Mr. Foulke's recommendation (*loc. cit.*) on the profitable Ladies Coat Company, Inc., which he has selected for analysis: "The only answer to overtrading [for this company] is for the

It is in this direction that control retention lies. Put somewhat differently, control retention frequently involves questions of reconciliation between profit-and-loss statement and balance-sheet considerations.

Turning to strictly theoretical aspects, it might be said that economics has at least two theories of the firm: the banking firm and the business firm. With slight exaggeration, it may be said that the theory of the business firm is presented entirely from the profit-and-loss statement point of view, while the bank is analyzed in terms of its balance sheet. In one case, an elaborate paraphernalia of cost and demand curves serves as the foundation of analysis. Profit maximization reigns supreme. In the other case, this apparatus disappears. Attention is focused on balance-sheet position, and primary emphasis shifts to liquidity (reserve maintenance) considerations as a means of meeting equity commitments (deposits).

It seems fair to assume that a more general theory of the firm, whether of the bank or business variety, would imvolve both balance-sheet and profit considerations. Moreover, control considerations need to be built into the theory. After all, the entrepreneur is not interested in maximizing profits *per se*. It is his profits that he seeks to maximize. Loss of control in the pursuit of profits may succeed only in maximizing someone else's profits. Fortunately, the problem of control maintenance (at the atomistic level) and the introduction of balance-sheet considerations seem to point in the same direction.

Control Maintenance at the Atomistic Level

Numerous methods suggest themselves for dealing with the problem of control maintenance at the atomistic level. For convenience, these numerous methods may be divided into the "direct" and "indirect" approaches. Professor M. W. Reder for example, has used a variant of the former in his article, "A Reconsideration of the Marginal Productivity Theory."[8] In his approach, Dr. Reder assumes that an entrepreneur is confronted with two profit-output timepaths. The greater of the two profit paths, while abstractly more desirable, involves securing capital on terms, which, while financially advantageous, imperil control.[9] Reder concludes that it is quite possible that the entrepreneur will not, as profit-maximizing theory implies, necessarily choose the greater of

management to plan and budget its operations so that [the highly profitable] net sales will not exceed a certain amount, that amount to be predicated upon the level of liabilities that will be incurred during the high point of the season, and the income [converted to liquid assets] to meet obligations on time with a reasonable margin."

[8] *Jour. Pol. Econ.*, Vol. LV, No. 5 (Oct., 1947), pp. 450–58.

[9] *E.g.*, the lender may require deposit of the controlling stock interest as collateral which the borrower agrees to forfeit under stipulated conditions. Other cases such as dilution of equity, etc., spring readily to mind.

the two paths.[10] Although Reder does not develop his formal analysis further, he points out that it has serious consequences for various parts of economic theory.[11]

Although this approach has the merit of bringing the control element directly to the fore, it also presents certain difficulties. For one thing, it is inflexible; for another, it is exceedingly difficult to obtain direct measures of control.[12] It does not adequately take into account various alternatives that the entrepreneur may have available. He may, for example, choose and select customers; he may offer differing discount arrangements; and he may use the business itself (perhaps at the expense of present profits) as a means of raising funds.[13]

In any event, the direct approach has been explored to some extent. Attention will therefore be directed here to the use of an indirect approach. For this purpose it is necessary to combine balance sheet and income statement measures. Since the balance sheet, which yields measures of liquidity, is primarily concerned with stocks (rather than flows), certain difficulties may be encountered. For the most part, these difficulties may be avoided by combining balance sheet with income statement measures. Thus, liquidity position may be defined in terms of a turnover rate of, say, cash to sales;[14] profit may be defined as return on net worth, etc. To a large extent the choice of measures is arbitrary and will depend on the nature of the particular problem. The notion should, however, be clear. Two variables may then be defined: $M(t)$, cash position, and $\pi(t)$, profit position, at time t. Similarly, output position is defined as $q(t)$. From these variables, two preference functions may be constructed:

$$M(t) = \phi[q(t)] \tag{1}$$

$$\pi(t) = \psi[q(t)] \tag{2}$$

[10] The choice will certainly depend in part on the difference in potential profits yielded by the two paths.

[11] On tax incidence theory, for example. In this connection it is perhaps worth quoting the results of the empirical study by J. K. Butters and Ralph Lintner, *The Effects of Taxes on Growing Business* (Boston, Harvard University, 1945), p. 2:

"High corporate taxes restrict the growth of small companies: (a) By greatly reducing the attractiveness of risky expansions to the managements of small companies; (b) By curtailing the amount of capital available from retained earnings to finance such expansions; and (c) By making the acquisition of outside capital on satisfactory terms much more difficult."

[12] *E.g.*, the greater-than-fifty-per cent stock ownership criterion of the SEC and the ninety-per cent criterion of the federal tax laws have alike been found inadequate. No better alternative has been devised despite much effort. The point need not be labored; it is evident to all who have attempted to formulate statistical indices of business concentration.

[13] The latter alternative is, of course, one variant of what E. A. G. Robinson in *The Structure of Competitive Industry* (London, Nisbeth & Co., Ltd., 1932), Chap. VIII, describes as "rushing the pessimum."

Footnote 10, *supra*, also describes an alternative which Reder does not discuss. Persons do go into business to make profits and are willing to take risks for the sake of greater profits.

[14] Or to avoid difficulties arising from the possibility of maintaining, say, cash constant via borrowing, indices of quick or current ratios to sales, profits, etc., may be computed.

which may then be combined into a single preference function:

$$q(t) = F[M(t), \pi(t)]. \tag{3}$$

Now the entrepreneur may wish to explore the neighborhood of his equilibrium values, or he may be subjected to certain "shocks" or "errors." To analyze his behavior in the neighborhood of equilibrium the following function is constructed:

$$q(t + 1) = f[M(t), \pi(t)]; \tag{4}$$

In words, output at time $(t+1)$ is dependent on cash position and profit position at time t. In contrast to (3) which represents a desired or satisfactory position, (4) may be depicted as representing actual position. The two equations may then be combined, and for equilibrium, or stationary values, the following result obtains:

$$\Delta q(t) = q(t + 1) - q(t) = f - F = 0. \tag{5}$$

Numerous types of curves and forms of behavior about equilibrium may be analyzed with the aid of this equation,[15] but attention will be restricted to a few cases of special interest.

Oscillatory and Non-Oscillatory Behavior of the Individual Firm

There are two basically different types of (stable) business behavior: oscillatory and non-oscillatory.[16] As is perhaps obvious, the distinction will turn on whether cash and profit position move together when output varies. Both cases are presented in the following graph[17]:

In this diagram (Figure 1) points AA and BB represent points of equilibrium in the sense that $q(t) = q(t+1)$ and F, the desired position,

[15] Equation (5), it will be noted, is a general form of difference equation in which a variable at one point in time is made a function of the same or other variables at another point in time. Professor Samuelson has analyzed, mathematically, a similar equation. See *Foundations of Economic Analysis* (Cambridge, Harvard University Press, 1947), pp. 302 ff. As he notes, it yields all of the qualitatively different types of behavior about equilibria points.

[16] These may be further subdivided into stable, unstable, and neutral behavior. In the interest of simplicity and compactness attention will generally be restricted to stable cases.

[17] Technically, it is the derivatives which are of interest. Monotonic stability is yielded by

$$0 < \frac{d\pi}{dM} < -\frac{\dfrac{\partial F}{\partial M} - \dfrac{\partial f}{\partial M}}{\dfrac{\partial F}{\partial \pi} - \dfrac{\partial f}{\partial \pi}} = \frac{D^q_M}{D^q_\pi}.$$

Oscillatory stability is yielded by $0 > (d\pi/dM) > (D^q_M/D^q_\pi)$. In these equations $d\pi/dM$ is the total rate of increase of π with a given increase in M. $\partial F/\partial M$ and $\partial F/\partial \pi$ represent the desired marginal cash and profit requirements of production, while $\partial F/\partial M$ and $\partial f/\partial \pi$ represent the actual requirements. Their differences, represented by D^q_M and D^q_π may be called "displacements" of actual from desired position; of course, actual may exceed or be less than (or equal to) desired. In general, then, stability is achieved or not according to whether

consists of a 45° straight line through the origin.[18] The two curves, f_1 and f_2, represent paths of actual movement. Thus, if a displacement to the right to, say, $q(t_0)$ occurs, it will be seen that actual cash position is

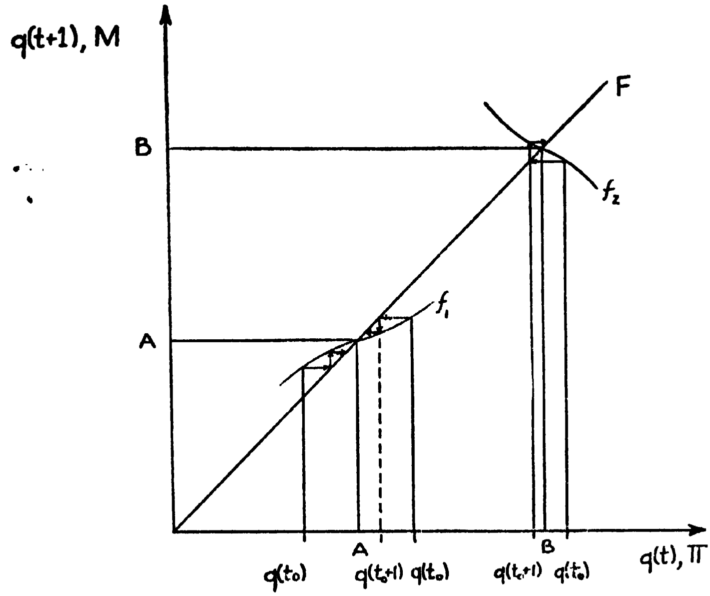

FIGURE 1

$$\left|\frac{d\pi}{dM}\right| \lesseqgtr \left|\frac{D_M^q}{D_\pi^q}\right|.$$

That is, whether the actual total rate of expansion is numerically less than the ratio of the displacements.

When the equality sign holds, (first order) neutrality results. When the open end of the inequality sign faces right, stability occurs, and when it faces left, instability occurs. Stated in words, stability requires that, whatever the absolute rate of expansion, (the ratio of) displacement of actual from desired position must be numerically even greater. When they are just equal, the firm remains where it is (or oscillates in a fixed region) since it is no better off on moving from its new position. (Graphically, neutrality occurs when f is a horizontal straight line or is orthogonal to F.) When the expansion rate exceeds displacement, disequilibration occurs: the firm once set in motion continues to expand or contract. The division between oscillatory and non-oscillatory motion is marked by a horizontal line while the division between oscillatory stability and instability is marked by a line perpendicular to the F curve.

[18] The meaning of this line will subsequently be made more clear. For the present, suffice it to say that it not only presents the principles involved most simply but that F also has this shape and position by virtue of the definition of equilibrium adopted—*i.e.*, $q(t+1)=q(t)$. This definition which is most closely allied with statics is, of course, arbitrary. It would be possible to define equilibrium as existing when $q(t+1)=kq(t)$, where k is some constant; or, more generally, $q(t+1)=\gamma[q(t)]$. The latter definitions would be more appropriate to dynamical systems where equilibrium is moving through time.

below the desired (viewed vertically) while actual profit position is above desired (viewed horizontally) for this level of output.[19]

Along f_1 both cash position and profit position would be more satisfactory (at this level) for output $q(t_0+1)$ and so adjustment is undertaken in the direction indicated by the arrow. The firm is, however, constrained to move along f_1 and so when $q(t_0+1)$ is reached, the situation is still unsatisfactory (although in less intense form) and further contraction is undertaken until equilibrium is reached again at AA. If the equilibrium point is overshot to $q(t_0)$ on the left, then profit position is unsatisfactory while cash position is more than satisfactory. Expansion will then occur until AA is reached. Thus, an actual path of the type f_1 is stable on both sides with one-way equilibrating motion occurring in both directions.

Turning to the f_2 curve, a displacement to $q(t_0)$ may again be visualized as occurring to the right of the equilibrium point BB. This level of cash and profit position is not appropriate to $q(t_0)$ but rather to $q(t_0+1)$ at the left of BB. As adjustment is effected to this level, however, the entrepreneur finds himself in a more favorable position and expansion occurs. With diminishing oscillatory movements, return to equilibrium is thus effected.

It is worth while now to try to analyze the economic factors that seem to lie behind these movements. It will be noted that in both cases, cash position fell below the desired level at $q(t_0)$. For the f_1 curve, upon displacement to the right of equilibrium, cash position decreases relatively but increases absolutely; for the f_2 curve, cash position decreases both relatively and absolutely. An economic interpretation of these phenomena of the following character is suggested: One-way stability occurs in the f_1 case because the absolute increase in cash position with expanded output allows the firm, despite its relative decrease in cash position, to adjust its output step by step to a satisfactory level: When both an absolute and relative decrease in cash position occurs, the firm is forced to make a more violent adjustment in an effort to restore its liquid position. The firm thus contracts beyond its point of equilibrium; with the relative and absolute increase in cash position it may then expand beyond the equilibrium point and recoup its profit position. And

[19] With the assumptions implied by linearity, and uniqueness of the F curve, this can be interpreted to mean that stability implies that profit position increases at a less rapid rate than cash position multiplied by a proportionality factor. For $(\partial F/\partial\pi)=(\partial F/\partial M)=1$, and, if we choose $\left(\frac{\partial f_1}{\partial M}\right)=1/k$ at a point $q(t_0)$, then $\left(\frac{\partial f_1}{\partial \pi}\right)=k$; these two slopes are orthogonal. Thus, we have $0<(d\pi/dM)<(1/k)$, or, $d\pi<(dM/k)$. The weighting factor, $1/k$, is yielded by the rate of increase of cash position; its reciprocal, k, is the profit weight. Stability then implies that $k<1$, neutrality that $k=1$, and instability that $k>1$. This is merely another way of stating that stability requires that the actual rate of increase must be less than the desired. (The signs, incidentally, are reversed when $k<0$.)

so on. The firm constantly exchanges cash for profit position, via oscillations in output, until equilibrium is restored.[20]

What cases in the real world are likely to correspond to these types of behavior? It is impossible to answer this question without exhaustive empirical investigation.[21] The world of theory, however, suggests certain cases. In many textbook discussions, at least, a sharp distinction is drawn between the theory of the bank and the business firm.[22] As noted at the outset, one distinction lies in the direction of profit-maximizing and liquidity-preserving behavior. Another distinction, which is not always articulated, is that the theory of the business firm is presented in terms of equilibrium analysis while the theory of the bank is presented primarily as a disequilibrating process. Few, if any texts, discuss the behavior of the bank in the vicinity of equilibrium.[23] It is fairly obvious, then, that both discussions must be reduced to the same common denominator before comparisons can be drawn. This may, perhaps, best be done by investigating the behavior of these two types of firms in the neighborhood of equilibrium.[24]

[20] Numerous other cases can be visualized by drawing appropriate curves. The firm may upon contraction beyond equilibrium find itself still unable to restore its cash position and further contraction occurs; on the other hand, the increase in cash position may be so large as to allow it to move forward to a new (ultimate) position of equilibrium, etc. Both stable and unstable and combined cases can easily be constructed. Moreover, the analysis can be conducted from the profit side (by reversing the axes of M and π), but the principle will remain unaffected.

[21] The cash sales of certain types of "credit" sellers, which seem to occur with relative frequency, at least in certain types of retailing, seem to give evidence of oscillatory behavior. It is not possible to tell with certainty, however, whether such sales merely represent sharp trading practice.

[22] In what follows it should be understood that it is the main outlines of formal theory that are being discussed rather than such theory as modified and qualified by particular teachers or research personnel. Such persons may make substantial modifications in their use of textual material. Conversations with numerous economists have convinced me that the above presentation is probably, at most, a presentation of these modifications in more systematic form than is, perhaps, ordinarily done.

[23] This is, perhaps, too strong a statement. Some texts note, for example, that a bank is required (or desires) to maintain its reserve ratio "on the average" rather than "at every moment of time." This implies, it should be noted, oscillatory behavior. As the bank reduces its reserve position below requirements, it increases its profit position, then, above the "equilibrium" level. If it is to maintain its reserve position "on the average" it must then contract its output (loans) and hence its profits below the equilibrium level at another point in time. Few, if any, texts proceed then to analyze whether such behavior is stable. It seems to be generally assumed that fluctuations will continue about this "equilibrium" and that no shift in "equilibrium" will occur.

[24] It should be noted (*cf. supra*, footnote 19) that the ordinary bank-type expansion formula can be derived from the equations that have been posited. Thus, we have $d\pi \gtrless (dM/k)$ (the inequality sign is reversed for $(d\pi/dM)<0$) where $1/k$, the weighting factor is obviously related to the reserve requirements via the rate of expansion. (It should be noted that $1/k$ changes as movement along f occurs.) While little discussion of the relation between loans and profits can be found in the textbooks it seems fair to assume that profits are proportional to loans (output). Thus, we have $d\pi = cdq$ where c is the constant of proportionality. Upon

substitution in the above formula, and eliminating the inequality sign at equilibrium (*i.e.*, viewing equilibrium as neutral—or, alternatively, by multiplying by a large enough factor to eliminate the inequality) we obtained: $dq = (dM/k)$.

It may be of interest to present the diagrammatic picture (Fig. 2) as follows:

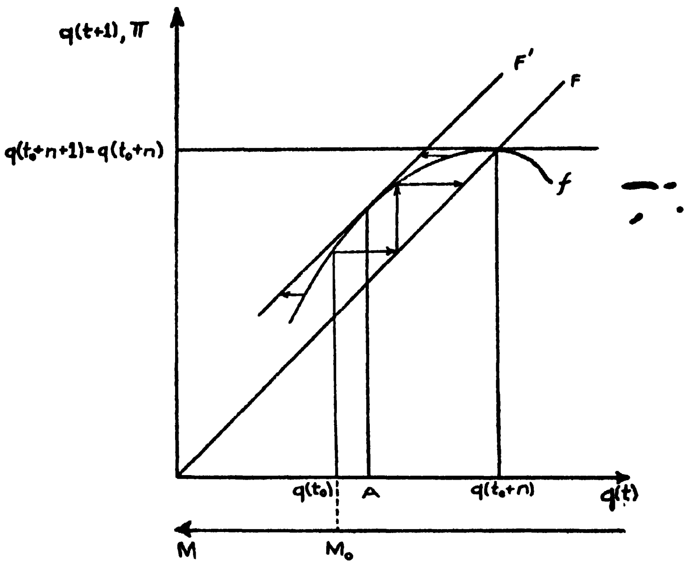

FIGURE 2

Assume that the bank begins at $q(t_0)$ with cash position M_0 in excess of requirements. (It should be noted that M is here drawn in the reverse direction since it is generally assumed that M decreases as output expands.) The bank will then, as indicated by the arrows, move along the f curve until equilibrium is reached. Trouble, however, arises at two points: $q(t_0+n)$ and A. At $q(t_0+n)$ profits are maximized but this implies then that the bank at equilibrium is independent of its cash position. In a narrow sense, this may create no particular psychological or logical difficulties since this result holds only at a point, and only if it be insisted that absolute profit maximization occurs here. Ordinarily this difficulty is avoiding by choosing a particular K—by some averaging process or by some institutional device—and avoiding discussion of profit maximizing behavior. Actually this assumption (sometimes stated as the assumption that the firm has access to an infinite cash balance at the going rate of interest in markets in which it buys) is used in discussion of the business firm. It is obviously inapplicable to banks.

No particular difficulty occurs for business firms, but ultimately the size of any business firm is determined via diminishing proportions as long as a fixed factor is assumed in the analysis. No such limitation is present for banks. Practically, the point may be of small interest since, in the United States at least, ready-made institutional limitations lie at hand. Nevertheless, throughout stretches of history and, indeed, in parts of the contemporary world no such institutional restrictions exist. On special assumptions, the principle of increasing risk may be brought into play to limit the size of the individual bank. In general, however, both statistical and administrative reasons point in the opposite direction.

Point A is also of interest since for the right-hand member of the inequality it yields the indeterminate form 0/0. (*I.e.*, at this point, $(\partial F/\partial\pi) = (\partial f/\partial\pi)$ and $(\partial F/\partial M) = (\partial f/\partial M)$.) It is, of course, the point where disequilibration ceases and equilibration begins. An economic significance may be attached to this point for it also offers an alternative choice to the entrepreneur. He may be interested in maximizing his position relative to requirements. (This, it

Various writers have attempted to distinguish between bank-type and business-type firms.[25] Business-type firms may be said to receive at least partial cash payment for the sale of goods. When this happens, the absolute size of their cash position may increase even though the relative position falls. When such is the case, monotonic stability (or instability) will occur. The peculiarity of a bank—at least of the textbook variety—seems to be that what it sells is cash for which no cash payment is received at time of sale. This results in absolute deterioration of cash position, and hence oscillatory behavior.[26]

The requirement that cash position reduce absolutely as well as relatively may perhaps be viewed as too strong. This condition may be now relaxed. It proves to be only a special case of a more general phenomenon in which liquid and profit position move inversely when referred to the common sequence of desired points.[27] A simple case illustrating the type of movements to be expected under these conditions is presented in Figure 3.

will be seen, implies that he alters his choice of weights as to the relative importance to be attached to cash and profit position.) When this is done, only one-sided stability is manifested. (This may be seen by shifting the F curve downward to the F position, which may be done since it is the movements rather than the particular point values which are of interest.) Movement to the right results in contraction toward equilibrium; movement to the left results in one-way further contraction. It is this type of behavior which some writers may have in mind when they state that the banks may be "too stable" downward—*e.g.*, when they are trying primarily to protect their cash position.

[25] *Vide*, J. R. Hicks, *Value and Capital*, p. 241: "Every business has, at any moment, a certain amount of claims against it, which it may be called upon to meet at dates which cannot be quite certainly predicted. The clearest case of this is, of course, the case of banks, which live by acquiring such liabilities and therefore have an exceptional amount of them." Since Hicks does not discuss the subject further, it is difficult to ascertain what distinction he is attempting to draw. Does he mean that banks have exceptionally low quick or current ratios? This is clearly not the case. Many types of business display lower ratios and other types display, of course, higher ratios. As for individual business ratios, it is impossible to generalize. But many businesses must display considerable variation in their financial ratios over the years. If Hicks is referring only to the absolute size of current liabilities, his statement would make it difficult to draw comparisons between firms.

[26] As will be remembered, it is stable *equilibrium* analysis which is of primary interest. Oscillatory unstable behavior may be thought of, perhaps, in terms of a stock market plunger or an old fashioned investment bank. At one point of time cash is largely tied up in security issues which are then liquidated (including seasoning operations) and a new process of expansion begun, assuming successful operations. Thus the activity results in constantly expanding interchanges between profit position and cash position as the firm continues to grow. (Since output, loans, also oscillates, growth must be measured, say, by total assets.)

[27] The sequence of points need not, however, be common in the sense of coincident. In Figure 3, a single straight line is used for purposes of simplicity in illustration. Equation (4) may be decomposed into:

$$q(t+1) = f_1[M(t)] \quad \text{and} \tag{6}$$

$$q(t+1) = f_2[\pi(t)]. \tag{7}$$

Similarly, equations (1) and (2) may be solved to yield:

$$q(t) = \phi^{-1}[M(t)] \tag{8}$$

In this case the profits curve, π, and the liquidity curve, M, are drawn on opposite sides of the curve of desired positions, F. Thus π is more than satisfactory (at a given output) and indicates further expansion while M is less than satisfactory (at a given output) and indicates contraction. At $q(t_0)$ the level of liquidity attained would be satisfactory at the output level indicated by the arrow A; the profit level is that indicated by the arrow B. The two opposing forces then yield a compromise solution indicated by the arrow AB for output level $q(t_0+1)$. Output is expanded. The process might be described as the profit force prov-

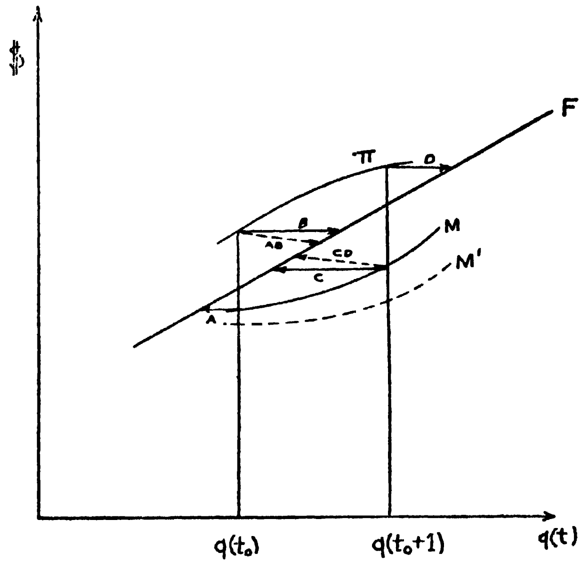

FIGURE 3

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(9) $$q(t) = \psi^{-1}[\pi(t)].$$

Upon combining (6) and (8), and (7) and (9), differencing and then differentiating the following two equations are obtained:

(10) $$\frac{dM}{dq}\left(\frac{\partial f_1}{\partial M} - \frac{\partial \phi^{-1}}{\partial M}\right) \lesseqgtr 0$$

(11) $$\frac{d\pi}{dq}\left(\frac{\partial f_2}{\partial \pi} - \frac{\partial \psi^{-1}}{\partial \pi}\right) \lesseqgtr 0.$$

These equations may then be combined (with due regard to the inequality signs) to yield:

(12) $$0 \lesseqgtr \frac{d\pi}{dM} \lesseqgtr \frac{\dfrac{\partial \phi^{-1}}{\partial M} - \dfrac{\partial f_1}{\partial M}}{\dfrac{\partial \phi^{-1}}{\partial \pi} - \dfrac{\partial f_2}{\partial \pi}}.$$

The formal (qualitative) properties of this equation are the same as the one used previously.

ing relatively more powerful than the liquidity force and hence resulting in expansion despite the risk to control retention that is implied.

At the new output level, $q(t_0+1)$, the strength of the forces is now reversed. C, the liquidity arrow is now longer than D, the profit arrow. The firm thus contracts in an attempt to restore its cash position, as indicated by the arrow *CD*. (Having achieved a high enough level of profit, it might be said, the profit drive is weakened since the opportunity for larger profits decreases relatively while the incentive toward increased liquidity is strengthened. Liquidity considerations become dominant.) Thus, the firm proceeds by oscillating movements to a point (if it exists on the time path) where the opposing forces exactly cancel. Upon displacement the oscillatory process again occurs.[28]

At this point it is perhaps worth pausing to note that the traditional textbook approach does imply that the bank-type firm is one in which cash position and profit position move inversely. In the neighborhood of equilibrium they move on opposite sides of the desired (required) position and hence tend to result in oscillatory behavior. This observation may be of some importance for the policy conclusions frequently drawn about the control of bank behavior and stabilization of economic behavior. The usual policy recommendations for raising reserve requirements and engaging in open market operations may then have the opposite results from those intended. By driving the banks to equilibrium (or beyond), such policies may actually engender instabilities by stimulating oscillatory behavior on the part of the banks and (through a process akin to sympathetic vibrations) transmit these behavior patterns to the entire economy. Instability rather than stability may therefore result.[29] Of

[28] The arrows drawn in the chart and the description given above are only approximately accurate, but sufficient for qualitative purposes. More strictly, if π and M be described as the curves of total profits and liquidity (rather than their derivatives), it is both the distance and the rates of change which are of interest. The process might be visualized diagrammatically something along the following lines. At the initial point draw the tangents to the curve. This determines the gradient. The magnitude and direction of the vectors may be then determined as follows: draw circular arcs from the radius (at the point of tangency) of length equal to the distance from the actual to the F curve. When the actual curve, π, lies above the F curve, turn the radius about the point of tangency upward to the right; when the actual, M, lies below the F curve, pivot the radius downward to the left. The intersection of the circular arcs with the tangents then determine the length and direction of the vectors. The resultant may then be computed.

It should then be noted that equilibrium requires not only that the tangents to the two actual curves be equal but also that, at such a point, the curves must also lie equidistant from F. In general, such conditions will probably not be met so that firms subject to inverse movements of π and M will engage in continuing oscillatory behavior.

[29] I have not yet analyzed completely the precise conditions under which stable business-type and stable bank-type behavior will, when combined, result in unstable aggregate behavior. It would seem, however, that two conditions are necessary for the emergence of instability despite the stability of the banking and business sectors. These conditions are (1) that the bank-type firms should be trading (borrowing and repaying) with each other and (2) that the bank-type firms should be dominant in the sense that the preponderant volume of business is conducted by them. (Bank-type firms are not necessarily coincident with legally defined banks.)

the two approaches (raising reserve requirements and open-market operations) the latter is the more likely to yield instability since it will tend to (1) draw down reserves of bank-type firms and (2) force business-type firms into bank-type behavior. The second of these two results is accomplished because the drawing down of the money supply while, say, the firm is expanding will force liquid position to move in the opposite direction to profit position even in cases where such results would not "naturally" have happened.

Another aspect of stabilization control frequently adverted to in economic literature is tax policy. In so far as the above remarks with respect to maintenance of liquidity position and monetary policy are applicable, they must enter into tax considerations as well. For taxes must, in general, be paid in cash. Thus, it may be that the theory of incidence and shifting of taxes on business profits also requires reconsideration. In so far as liquidity considerations enter into business policy, it seems clear that the time paths, if not the ultimate positions of equilibrium, will be affected. But even the positions of ultimate equilibrium may be affected. Thus in Figure 3, the M' curve represents the shift in the M curve which follows the imposition of a progressive tax on the firm's profits—the π curve. For bank-type firms, the case seems clear.[30] But even business-type firms concerned with maintenance of liquidity position will display similar effects. Thus in Figure 1, a proportional tax on profits which must be paid in cash will shift the f_1 curve vertically downward and hence alter the position of equilibrium. If a progressive tax is levied, the curve will not only shift position but change shape. Thus, the impact of the tax may also alter the basic pattern of behavior of the firm—from one-way to oscillatory movement.

Liquidity Position and the Theory of the Business Firm

Rather than pursue further the policy implications of the introduction of liquidity and control maintenance considerations into entrepreneurial decision-making, it may be of interest to examine the possible correspondence with more traditional treatments. Although it is difficult to ascertain precisely what assumptions are made with respect to liquidity position and control maintenance in business-firm theory, there are certain theorems which will, if analyzed, permit of more or less valid conjectures. For example, it is usually assumed that under profit maximizing behavior "the firm" will proceed to where $d\pi=0$. Further-

The above approach may also contain suggestions for phases of the economic aggregation problem. By building the monetary variable in at the micro level it becomes possible to pass with relative ease to the macro level. Incidentally, the above approach suggests that turning points in business cycles, when banks have reached equilibrium reserve positions, would be marked by turbulence rather than the smooth downturns posited by some writers on cycles.

[30] This should not be interpreted to imply that writers, on tax shifting, have argued that taxes on bank profits, which must be paid in cash, are not shifted.

more, it is usually assumed that $d^2\pi < 0$. With the aid of diagrams, the implications of these conclusions for liquidity position and control maintenance may, perhaps, be analyzed.[31]

[31] The mathematical analysis of these higher order stability conditions becomes quite involved. Samuelson (*op. cit.*, p. 306) has provided an exhaustive mathematical analysis which makes repetition superfluous. What is involved, may, however, be seen with the aid of Figure 4.

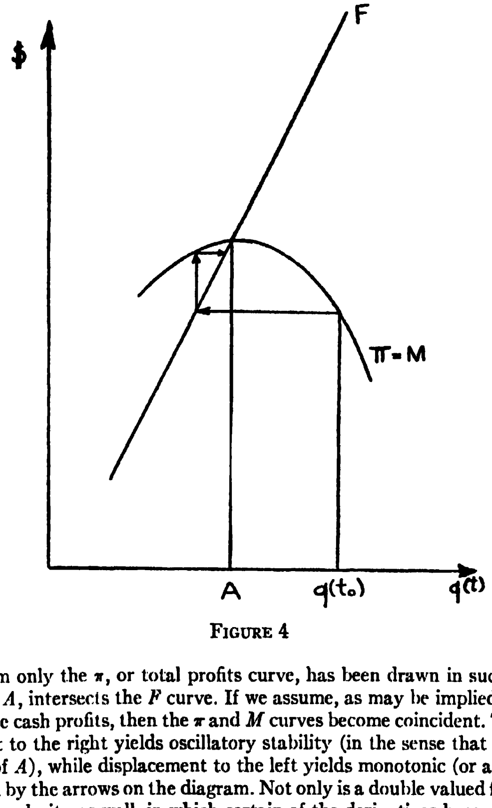

FIGURE 4

In this diagram only the π, or total profits curve, has been drawn in such a way that the maximum point, A, intersects the F curve. If we assume, as may be implied by some writers, that all profits are cash profits, then the π and M curves become coincident. The case is stable; but displacement to the right yields oscillatory stability (in the sense that the adjustment is then to the left of A), while displacement to the left yields monotonic (or asymptotic) stability—as indicated by the arrows on the diagram. Not only is a double valued function involved, but a point of singularity as well, in which certain of the derivatives become zero and others become infinite. The maximum point at A lies on the horizontal line which divides one way and oscillatory behavior. Moreover, there are various points of neutrality which yield $f' = F'$ or $f' = -F'$ which divide stable from unstable behavior

$$\left(\frac{d\pi}{dM} = \pm \frac{D_M^q}{D_\pi^q}\right).$$

Finally, if it be assumed that either f' or F' equals zero, then

$$\frac{d\pi}{dM} = -\frac{\frac{\partial f}{\partial M}}{\frac{\partial f}{\partial \pi}} = -\frac{\frac{\partial F}{\partial M}}{\frac{\partial F}{\partial \pi}},$$

Although the first order condition, $d\pi = 0$, results in no particular difficulties, the second order condition, $d^2\pi < 0$, may yield oscillatory rather than monotonic behavior. This is not what might be expected from the smooth adjustments ordinarily posited in the theory of the firm.

The concept of control loss through unsatisfactory profit position, although not perhaps as sharp as might be desired, can be fairly handled within the usual theory of the firm. It is the concept of control loss, through unsatisfactory liquid position that offers the most difficulty. That control loss can occur from this direction seems to be a fact of business experience beyond dispute. Not only small, but large business firms have been subjected to this danger, if not actual experience.[32]

In Figure 5, an attempt is made to bring these various features together in a form which seems to approximate ordinary theory. Along the horizontal and vertical positions are plotted profit and cash position, π and M. On opposite axes are plotted risk of control loss through π and M which are assumed to decrease (increase) as π and M increase (decrease). The q_1 and q_2 curves represent various combinations of cash and profit positions which can be obtained for a fixed output position—*e.g.*, q_1—under different policy arrangements affecting price and credit terms, selection of customers, etc. The diagram is plotted so that $q_2 > q_1$; *i.e.*, the larger subscript indicates the larger output.[33]

Reading from the upper right-hand corner, the I curves represent indifference curves which descend in level proceeding outward from the origin.[34] Thus I_1 represents a lower level of indifference than I_2.

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or the marginal rate of expansion is equal to the ratio of the desired and actual marginal rates of transformation. Presumably in the usual theory these are all zero so that either or both the numerator becomes zero (implying that both actual and desired rates are independent of cash position at equilibrium) and the denominator becomes infinite.

If it be assumed that both

$$\frac{d\pi}{dq} = 0 \quad \text{and} \quad \frac{dM}{dq} = 0 \quad \text{then} \quad 0 \lesseqgtr \frac{d^n\pi}{dq^n} \lesseqgtr \frac{D_M^q}{D_\pi^q} \cdot \frac{d^nM}{dq^n};$$

in this form a proportionality—at equilibrium—between profit and cash position rates of increase is established. It is not possible to analyze this equation further in this article. The case,

$$\frac{d^2\pi}{dq^2} < 0 < \frac{D_M^q}{D_\pi^q}\frac{d^2M}{dq^2},$$

yields oscillatory rather than monotonic stability.

[32] In bankruptcy reorganization cases, cash considerations have frequently proved decisive. The old "upset" price was a species of this phenomenon as well as the hard bargains that stockholders interests were able to drive on occasion. Even the revised federal bankruptcy statutes have not adequately handled the difficulty.

[33] These levels are determined from a three dimensional surface with π and M plotted on the horizontal axes and q on the vertical axis. More generally, since π and M, as functions of q, would not reach their maxima at the same levels, crossing over of the q curves would occur.

[34] The linearity of these curves implies that the entrepreneur views risk of control loss through M and π as perfect substitutes.

Assume now that the entrepreneur finds himself at a point P on q_1. By moving along q_1 (by changing his price and payment policies) he may thus move to higher levels of indifference. The highest level he can achieve with this output is π_0, M_0, where q_1 is tangent to I_1, and which may thus be labeled a point of equilibrium. The equilibrium is, however, unstable; the slightest displacement along I_1 allows the entrepreneur to move along a new, and greater, q curve, to an even higher level of indifference. At the point of intersection with q_2, for example, the entrepreneur may then move along q_2 to I_2, and so on, until he reaches the maximum possible level of indifference which his own operating conditions and risk preferences make possible. The E curve thus represents the sequence of equilibrium points.

Movement, as output expands, is thus oscillatory between π and M, although output position is monotone (never decreasing). Even though output position may be the same as that posited by simple profit-maximizing behavior, the price (or other business policies) may well be different.[35]

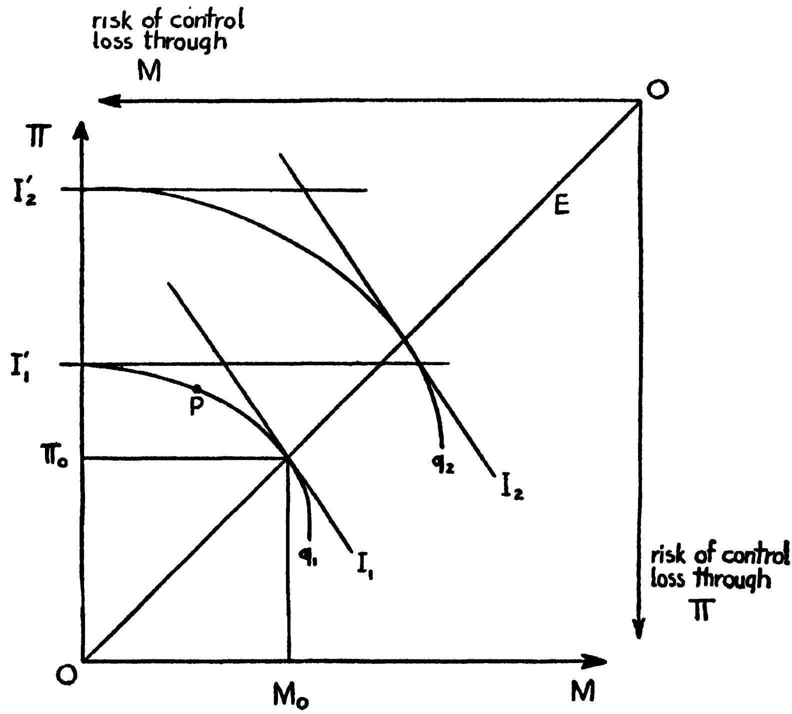

FIGURE 5

[35] The output position may also be different, especially if crossing over, as would generally happen, were allowed between the q curves. Even in the simple case utilized here, it should be noted that a tax on profits payable in cash would alter the shape of the q curves—generally at every point except at $M=0$.

I_1' and I_2' represent indifference curves which are independent of liquid position and hence of risk of control loss through deficiencies of M. This case may be thought of as corresponding more closely to the usual theory. But again behavior is oscillatory: the firm moving from P along q_1 up to I_1' and then to a new output level and a higher indifference curve.[36] The whole oscillation appears, however, in M; both π and q are monotonic (never decreasing). Increased cash position may be required (or an inevitable consequence of) expansion, but once π is maximized, the entrepreneur—*e.g.*, through an appropriate withdrawal policy—need maintain only a zero cash position. It is these cash oscillations which are not ordinarily described in business firm theory.

The entrepreneur may, of course, be independent of cash position in another sense which can be shown by making the I curve coincident with the π axis. Although this implies that the entrepreneur is then independent of risk of control loss through π as well as M, a valid interpretation is nevertheless possible. The firm may be viewed as moving "instantly" to its maximum position.[37] Since it occupies this position "instantly," the risk of control loss through π is fixed at every finite interval of time. Obviously, oscillatory movement in none of the variables occurs in this case.

Although it is difficult to disentangle precisely the assumptions that are ordinarily made concerning risk of control loss and liquid position, the above analysis may possibly serve to suggest what some of these assumptions may be.[38] At any rate, it seems worth while exploring the possibilities of introducing control and liquidity considerations more fully into the theory of business behavior.

Conclusion

Whatever the merits of the formal analysis presented in this paper, the quotation from the *Wall Street Journal* introduced at the outset, as well as the facts of everyday business experience suggest that liquidity position and control considerations are of great contemporary impor-

[36] The actual path followed cannot be determined without further assumptions—*e.g.*, as to the entrepreneur's "hurry" to reach his maximum π.

[37] This may perhaps be referred to as the "stationary" case and the preceding one as the "static" case. In neither case will a cash tax affect the ultimate position, although it may affect the path of movement in the "static" case.

[38] If q_2 is assumed as yielding maximum π, then further output expansion will cause the q curve to recede—*i.e.*, the maximum profit position will have been passed on the q axis in the three dimensional diagram noted in footnote 33. Crossing over will almost certainly occur. If it be assumed, however, that over the relevant range, the relative overexpansion results in a curve q_1' coincident with q_1 then the entrepreneur will be at the same level of indifference on both curves. His most easily made adjustment is thus to q_1. The process might be viewed somewhat as follows. Having overexpanded he attempts first to achieve optimum returns from this output by adjusting his price and credit policies. As a result of these policies, he finds (perhaps in a manner analogous to Marshall's "spoiling the market") that he would be equally well off by contracting his output to q_1. After doing so, he may then expand back to his maximum position.

tance in deciding business conduct. That these notions also possess historical significance is suggested by the following quotation from R. H. Tawney's *Religion and the Rise of Capitalism*:[39]

> The grievances which supplied fuel to social agitation, which evoked programs of social reform, and which prompted both legislation and administrative activity, sprang, not from the exploitation of a wage-earning proletariat by its employers, but from the relation of the producer to the landlord of whom he held, the dealer with whom he bought and sold, and the local capitalist, often the dealer in another guise, to whom he ran into debt. The farmer must borrow money when the season is bad, or merely to finance the interval between sowing and harvest. The craftsman must buy raw materials on credit and get advances before his wares are sold. The young tradesman must scrape together a little capital before he can set up shop. Even the cottager who buys grain at the local market, must constantly ask the seller to "give a day." Almost everyone, therefore, at one time or another, has need of the money-lender. And the lender is often a monopolist—"a money-master," a malster or corn monger, "a rich priest," who is the solitary capitalist in a community of peasants and artisans. Naturally, he is apt to become their master.

[39] (Pelican Books ed., 1947), p. 30.

TAXES, SAVING, AND INFLATION

By JAMES TOBIN

During the postwar inflation in the United States, Professor Sumner Slichter proposed a reduction of personal income taxes on the portion of income saved.[1] The immediate objective of the proposal was to encourage individual saving as a means of fighting the inflation. In addition, Professor Slichter believes it to be social wisdom to devote a larger share of full employment national income to saving and investment. To this end he offered his plan as a permanent feature of the tax system. This suggestion was enthusiastically seconded by Professor David McCord Wright,[2] both because he favors more saving and investment and because he believes the long-run prospects of the economy are inflationary.

As an anti-inflationary weapon, the plan has the great advantage of being politically painless.[3] Conventional anti-inflationary measures are never popular. But this proposal offers taxpayers, instead of an increase in income tax rates, a reduction in their tax liability. Indeed, Professor Slichter claimed that cutting tax rates during the inflation in 1948 would be harmless if accompanied by his proposal.[4]

The plan is to permit the taxpayer to exclude his saving, or some fraction thereof,[5] from his taxable income. Saving would be a "deduction," like charitable contributions or medical expenses. From the individual taxpayer's viewpoint, the plan is equivalent to replacing part or all of the income tax by a tax on his consumption expenditures.[6]

[1] S. Slichter, "The Problem of Inflation," *Rev. Econ. Stat.*, Vol. XXX, No. 1 (Feb., 1948), p.5, and "Tax Formula: for Savers, Lower Levies," *New York Times Magazine*, January 25, 1948. The argument that the income tax should not apply to saved income has a long history, which, together with a vigorous espousal of the thesis, may be found in Irving Fisher and H. W. Fisher, *Constructive Income Taxation* (New York, 1942).

[2] D. McC. Wright, "Inflation and Equality," *Am. Econ. Rev.* Vol. XXXVIII, No. 5 (Dec. 1948), p. 895.

[3] *Cf.* Slichter, "Tax Formula," *loc. cit.*

[4] *Ibid.*

[5] Professor Slichter suggests one-third.

[6] For a taxpayer with positive saving, the relationship between an income tax with saving exempted and a spending tax is as follows: Let Y be the taxpayer's income before taxes, C his consumption expenditure, S his saving, and R his tax liability. $C + S + R = Y$. Under conventional income taxation, R is a function of Y, R(Y). Under the Slichter proposal, $R = R(Y - bS)$ where b is the fraction of saving permitted to be exempted

Thus the Slichter proposal is closely related to the expenditures tax advocated by Wallis and Friedman as a wartime measure.[7] But while Wallis and Friedman proposed to combat inflation by temporarily adding an expenditures tax to the existing income tax, Slichter proposes to replace permanently the existing income tax, or part of it, by a tax on consumption.

How effective would exemption of saving from taxation be in weakening inflationary pressure? The privilege would certainly raise the amount of saving forthcoming from any given level of income before taxes. But saving may be increased at the expense either of taxes or of consumption. Substitution of saving for tax payments is of no help in a fight against inflation; it may even be a step backwards. Giving consumers a larger cushion of accumulated savings may strengthen their propensity to consume in subsequent years. Moreover, substitution of saving for taxes means that more government obligations are outstanding; and these obligations are actually or potentially bank reserves under present monetary arrangements. Professor Slichter argues that the availability of more current saving by individuals would facilitate the transfer of resources from consumption to investment without the necessity of bank credit expansion.[8] But if government expenditures are independent of tax receipts, any saving which merely replaces taxes will be matched by an increase in the government's demand for loanable funds. The needs of government and business to borrow from the banks will be undiminished, and the ability of the banks to meet these demands will be enhanced.

Therefore, if the plan is to realize its objectives, it must result in substitution of saving for consumption as well as for taxes. In evaluating the effects of the proposal on consumption, a temporary privilege of deducting saving must be distinguished from the permanent in-

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from taxation. This implies $R = R(Y-bY+bC+bR)$. That is, R depends implicitly on income Y and consumption C. If $b = 1$—all saving is freed from taxation—R depends only on C and the income tax is converted completely into an expenditures tax. The function $R(Y)$ is, under a progressive rate structure, a connected series of line segments of increasing slope. For taxable income in a range $Y_{n-1} < Y < Y_n$, the marginal tax rate $R'(Y)$ is a constant, r_n. Suppose that $R'(Y - bY + bC + bR) = r_n$. Then the marginal tax rate with respect to income is $(r_n - r_nb)/(1 - r_nb)$. The marginal tax rate with respect to consumption is $r_nb/(1 - r_nb)$.

The two plans differ in their treatment of dissaving. Under the Slichter proposal, dissavers would not be penalized; whatever their consumption, their tax would depend only on their income. Under a spending tax, dissavers, like everybody else, would pay taxes based on their consumption, regardless of their income.

[7] W. A. Wallis, "How to Ration Consumers' Goods and Control Their Prices," *Am. Econ. Rev.* Vol. XXXII, No. 3, Pt. 1 (Sept., 1942), pp. 501-12. Milton Friedman, "The Spendings Tax as a Wartime Fiscal Measure," *Am. Econ. Rev.*, Vol. XXXIII, No. 1, Pt. 1, (Mar., 1943), pp. 50-62.

[8] "Tax Formula," *loc. cit.*

corporation of this feature in the tax system. The plan has a better chance of reducing the propensity to consume out of income before taxes if it is regarded as temporary than if, as its proponents advocate, it is expected to be permanent. A principal motive for saving is provision for future consumption. The force of this motive is weakened if future consumption spending is expected to be taxed at the same rate as current consumption.

Even if the measure is understood to be temporary, its effectiveness is doubtful; consumer demand corresponding to a given level of personal income before taxes may even be increased. The deduction privilege is in effect a lowering of the price of saving in terms of income and consumption. Instead of costing one dollar of consumption, a dollar of saving costs one dollar less the tax deduction attributable to it. (If r is the applicable marginal income tax rate and b is the fraction of saving eligible for deduction from taxable income, the cost of a dollar of saving is $1 - br$ dollars of consumption.) Now lowering the price of saving has both substitution effects and income effects. The substitution effects are unfavorable to consumption. But any taxpayer who would save in the absence of the special incentive is given, under the proposal, an increase in disposable income equal to the tax on the deductible part of his normal saving. The increase in disposable income is favorable to consumption. There is no *a priori* way to decide whether the substitution effects or the income effects will predominate. But a measure which has income effects favorable to consumption is a weak method of fighting inflation.

Moreover, there are two features of the plan which limit its restrictive effects on consumption. First, the deduction privilege does not alter the price of dissaving. To qualify for tax relief, dissavers would have to cease dissaving and start saving. Short of a drastic revision of their budgets, the plan gives dissavers no incentive to reduce their consumption. Nor does it force them to consume less by imposing on them higher taxes. The plan could touch dissavers only by including a penalty for dissaving at the same rate as the bonus for saving. A penalty provision probably would not be acceptable on social and political grounds.

Second, due to the progressive structure of tax rates, the more a taxpayer saves the less he can gain by reducing his consumption further. His saving is excluded from the taxable income on which his marginal tax rate depends. Enough saving can move him to a bracket with a lower marginal tax rate. A taxpayer who would save in the absence of the plan gets a boost in his disposable income based on the marginal tax rate applicable to his taxable income before deduction of saving. His normal saving may be sufficient to move him to a lower

tax bracket. When he considers whether to increase his saving at the expense of his consumption, his calculations are made at a lower marginal tax rate, *i.e.*, a higher cost of saving. Consider, for example, a lowest-bracket taxpayer whose deduction for normal saving lowers his taxable income beyond the reach of the income tax. The deduction privilege gives him an increase in disposable income, some of which he may devote to increased consumption, but it offers him no incentive to substitute saving for consumption.

The difficulties due to varying marginal tax rates could be largely avoided by computing the tax deduction for saving in a different manner from the deductions now allowed. Instead of a deduction from taxable income, the privilege could take the form of a credit against tax liability computed by applying a uniform rate to the taxpayer's saving. Except for taxpayers with sufficient saving to reduce their tax liability to zero, the cost of saving to an individual would be independent of the amount of his saving.

The reduction in the price of saving in terms of income and consumption accomplished by the proposed tax revision is analogous to a general rise in interest rates. Both the deduction privilege and an increase in interest rates enable a saver to have larger funds at his disposal in the future for the same sacrifice of current consumption. Both increase the amount of future consumption which can be obtained with a given current income. Economic opinion has been uncertain and divided concerning the effects of interest rate changes on consumption and saving. Empirical evidence is inconclusive, and the current fashion is to attribute to interest rates little or no influence on the disposition of income. It is true that the tax proposal can accomplish much bigger changes in the price of saving than the usual range of variation of interest rates. On the other hand, a rise in interest rates does not suffer from the special features of the tax device which limit its effectiveness in inducing substitution of saving for consumption.

It is by no means certain, therefore, that the Slichter plan would restrict consumption spending even if it were regarded as temporary. The proposal has even less chance of achieving its anti-inflationary objective if it is expected to be permanent. This expectation will in no way weaken the income effects of the tax deduction privilege, which are favorable to consumption. But it will substantially weaken the substitution effects. Consider a taxpayer whose expectations of income and tax rates place him in the same marginal tax rate bracket in the future as today. Suppose that, in the absence of tax incentives, he plans to save in future years about the same amount he is currently saving, nearly enough so that deduction of saving from taxable income would not put him in a different tax bracket in the future. A temporary

exemption of saving from taxation might induce him to shift to the present some of the saving he had planned to do in the future and to postpone consumption. He would thereby avoid permanently tax payments on the increase in his current saving. But if the exemption of saving from taxation is permanent, the taxes are not avoided but only postponed. If the taxpayer shifts consumption from today until tomorrow, he adds to his future tax liability exactly what he deducts from his taxes today. Indeed, due to the progressive tax rate structure, he may add more to his future tax liability than he gains from tax exemption in the present. An increase in future consumption might carry the taxpayer into a higher tax bracket, because he would have less saving to deduct from future taxable income. Or a decrease in present consumption might take him into a bracket with a lower marginal tax rate.

For some taxpayers, whose income prospects and consumption and saving plans are not uniform over time, permanent exemption of saving from taxation could lead to a reshuffling of consumption and saving plans. But this reshuffling can work both ways; present consumption can be increased as easily as reduced. If a taxpayer expects to face different marginal tax rates in different years, the scheme gives him an incentive to shift his consumption to years when he expects to be in low tax brackets. Similarly the absence of a penalty for dissaving may lead to concentration of consumption spending in years when dissaving is planned anyway. For example, a taxpayer who anticipates dissaving when he retires will not increase his taxes in the years of retirement by planning to consume more at that time. He will receive current tax benefits by reducing his present consumption; consequently, for him the plan reduces the cost of future consumption in terms of present consumption. On the other hand, an individual who is currently dissaving in anticipation of higher future incomes which will permit him to save adds nothing to his current taxes and reduces his future taxes by dissaving more now and planning to save correspondingly more in the future.

A by-product of the scheme, whether adopted temporarily or permanently, would be to change regressively the size distributions of disposable income, wealth, and possibly consumption. Big savers in the high-income groups would receive increases in disposable income, while low-income families with zero or negative saving would not. To the extent that the high-income groups save their gains, inequality of wealth is promoted. If the beneficiaries increase their consumption, even the distribution of consumers' goods is altered against the low-consumption groups who receive no advantage from the tax reduction. The regressive features of the plan would diminish its political appeal,

one of the principal advantages claimed for the proposal, and might well increase inflationary pressure due to wage demands. Regressive effects could be lessened by placing a ceiling on the allowable deduction of saving or by varying the fraction of saving eligible for deduction inversely with the amount of saving claimed. But these provisions would also diminish, in the same manner as the progressive structure of tax rates, the incentive for substituting saving for consumption.

By a more fundamental revision, the Slichter proposal can be made both more effective against inflation and less regressive. Tax rebates would be allowed not for all saving but only for additions to the taxpayer's normal saving. This revision eliminates the perverse income effects; tax relief would be obtainable only by curtailing consumption. The economic meaning of "normal saving" is the amount the taxpayer would save given his income before taxes and given the tax law without the rebate provision. No legal formula can do more than approximate the economic meaning. A possible approximation would be a schedule of normal saving for tax purposes, determined by the government. Based on family budget data, the schedule would relate normal saving to income, number of dependents, and perhaps to other factors. The taxpayer could claim deduction only for saving in excess of the figure in the schedule applicable to him.

Such a schedule—or any other legal formula for normal saving, such as the taxpayer's saving in some previous year—is bound to overstate the normal saving of some and understate that of others. These inevitable errors reduce the anti-inflationary effectiveness of the plan. Taxpayers whose normal saving is understated will receive a windfall, with income effects favorable to consumption. Taxpayers whose normal saving is significantly overstated are unlikely to change the disposition of their incomes. Like the dissavers considered above in the analysis of the original proposal, they must take an unrewarded cut in consumption before they can begin to claim tax rebates for further cuts. The plan could be made certain to affect all taxpayers by including a penalty tax for under-saving as well as a tax deduction for over-saving.

To summarize, tax rebates for all saving are not a reliable method of restricting consumer demand and stopping inflation. They are especially ineffective if they are expected to be a permanent feature of the tax system. A temporary plan to exempt saving from taxation can be strengthened by confining the exemption to saving in excess of some normal amount. It can be further strengthened by penalizing taxpayers who save less than normal amounts as well as rewarding those who save more. Even with these amendments, the proposal requires for its success a high degree of substitutability between present

and future consumption. And the amendments spoil the spectacular, if illusory, political appeal of a proposal which promises to stop inflation by reducing taxes.

The quest for anti-inflationary medicine which is both effective and palatable is, nevertheless, an important one. What means of restricting the consumption of a taxpayer to a given level will deprive him of the least satisfaction? This question is surely relevant to an appraisal of anti-inflationary tax measures, even though it is not to be expected that the constituents of political appeal can be discovered in the economic theory of consumer preference.

An answer to the question requires assumptions concerning the taxpayer's preferences. The following assumptions are made: (1) Given his level of current consumption, the taxpayer prefers more future purchasing power to less; (2) Given the terms of exchange of present consumption for future purchasing power, the taxpayer will both consume more and save more the higher his current disposable income; (3) To leave the taxpayer at a given level of satisfaction, it is necessary to provide him with increasing amounts of future purchasing power for every additional dollar of current consumption of which he is deprived.

We exclude from consideration measures which would involve a net gift by the Treasury to the taxpayer, either in cash or in government obligations.

Clearly the best way of restricting consumption to a given level, from the taxpayer's standpoint, is the one which leaves him the most saving to go along with that consumption. Also, the taxpayer will be better satisfied with this solution the greater the future value of the saving. Consequently, he will prefer a temporary measure, which will not restrict or tax his future disposition of the saving, to a permanent measure.

By this standard, a temporary expenditures tax—which amounts to the same thing as an income tax with saving exempted—is superior to an income tax. If each is levied at the rate necessary to induce the taxpayer to restrict his consumption to a given amount, the expenditures tax will leave him with more saving. This follows from the fact that the expenditures tax can take advantage of whatever substitutability there is between present and future consumption, while the income tax must rely wholly on income effects. In Figure 1, saving is measured on the vertical axis, and consumption on the horizontal axis. I_1, I_2, I_3 are indifference curves embodying the assumptions stated above concerning consumer preferences. Curve X is the locus of points of tangency of indifference curves with line of slope -1. Y on each axis represents the consumer's income before either of the taxes under con-

sideration. Point A shows the consumption and saving chosen by the consumer. C is the level of consumption to which he is to be restricted. An income tax would accomplish this restriction by moving him to point B, where a line parallel to YDAY would be tangent to an indifference curve. An expenditures tax will be represented by a line which starts on the saving axis at Y and has a steeper slope than YDAY. The slope will be steeper the bigger the tax. (A progressive expenditures tax would be shown by a broken line convex upwards.) The expenditures tax which will induce the taxpayer to consume only C will be shown by a line tangent to some indifference curve at a point directly above C. Now the indifference curve through D has a slope at D steeper than -1, while the indifference curve through B has a slope at B equal to -1. The expenditures tax line through B has a slope steeper than -1, while the line through D has a slope equal to -1. Therefore there is a point K, between B and D, where an expenditures tax line YKE touches an indifference curve I_2. Thus an expenditures tax leaves the taxpayer better off than an equally effective income tax.

Neither of these measures, however, is as satisfactory to the taxpayer as a suitably designed compulsory savings levy. The major weakness of an ordinary compulsory savings plan is that the assets which consumers are forced to acquire are good substitutes for assets which they already own or would voluntarily acquire. Consequently, consumers damage their financial position very little by maintaining their consumption and reducing their voluntary saving or, if necessary, dissaving. This weakness can be avoided by a levy in return for which government obligations are issued only if the taxpayer's saving meets a specified standard. If the taxpayer cannot show the required amount of voluntary saving, the levy on him is simply an income tax.

A compulsory savings scheme with teeth can limit the taxpayer's consumption and give him the rest of his income in saving. This can be accomplished, for example, by levying a tax equal to CY in Figure 1 and by giving the taxpayer government bonds equal to the tax provided his dissaving during the year is zero. The line showing the alternatives open to the taxpayer is YDCH, and the best choice he can make is point D. Here he is better off than under an expenditures tax or income tax which holds him to the same consumption. On our assumptions, which imply some substitutability between present and future consumption, the same result can be achieved by a smaller levy (FY). In this case eligibility to receive government bonds would require positive saving equal to CF, the difference between income after the tax and the given consumption level. The alternatives open to the taxpayer lie along the line YDGJ. The tax must be large enough so that the line GF lies below I_3, the indifference curve through D. The important

feature of compulsory savings schemes of this type is to give the taxpayer no intermediate choice; either he keeps his consumption down and commutes his tax payments into bond purchases or he fails to save the required amount and pays the tax in full without recompense.

In practice a compulsory savings levy of this kind would not supersede the existing income tax but would be added to it when an inflationary situation warranted. Complete conversion of the income tax into a compulsory savings scheme would change regressively the distribution of income after taxes and of wealth. It would also provide the public

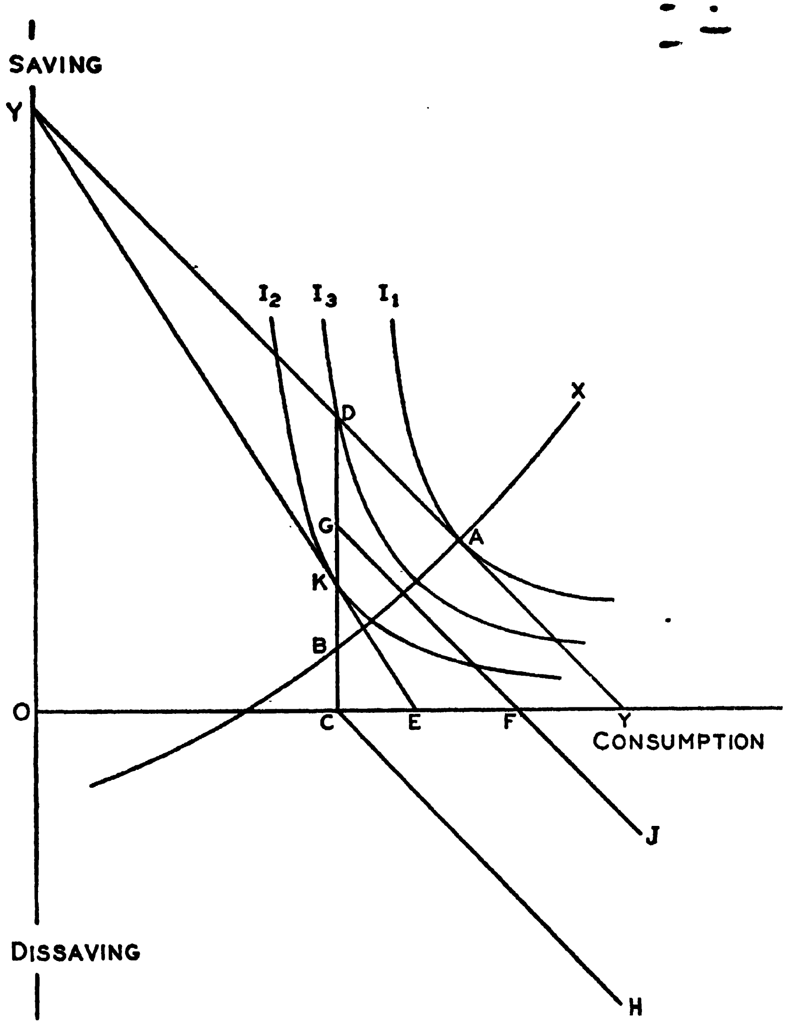

FIGURE 1

with an accumulation of assets which might prolong inflationary danger.

For the purposes of this plan the government would have to determine a schedule of the voluntary saving which taxpayers must perform in order to be eligible to receive government bonds in return for their tax payments. Together with the schedule of tax rates, this schedule would determine the levels of consumption to which the program would seek to hold taxpayers. The schedule should, therefore, be based not only on income but on number of dependents.

Administration and enforcement of a compulsory savings levy with teeth, or of an expenditures tax, or of rebates for saving would be complicated by the requirement that the taxpayer declare and be able to prove the amount of his saving.[9] The taxpayer would have to show such data as net purchases or sales of securities, changes in bank deposits, changes in indebtedness, changes in cash value of insurance policies. For the anti-inflationary purposes of these schemes, "saving" would have to exclude purchases of houses and other durable goods. Care would be required to prevent taxpayers from claiming capital gains, realized or unrealized, as saving. Administration of any of these plans would be difficult both for the tax collector and the taxpayer, but the information demanded and the problem of checking its accuracy are not basically different from the requirements of existing tax legislation.

[9] This subject can only be mentioned here. For an optimistic view of the administrative feasibility of such a requirement, see K. E. Poole, "Problems of Administration and Equity under a Spending Tax," *Am. Econ. Rev.*, Vol. XXXIII, No. 1, Pt. 1 (Mar., 1943), pp. 63-73. For the opposite view, see H. H. Villard, "Monetary Theory," *A Survey of Contemporary Economics* (Philadelphia, 1948), p. 343.

DISCRIMINATION IN INTERNATIONAL TRADE

By FRANKLYN D. HOLZMAN*

I. *Introduction*

Economists concerned with international trade problems have been divided as to the advisability of the use of discrimination in the administration of quantitative restrictions[1] in the present period, a period in which the structure of trade is disrupted, partly because of the destruction which accompanied World War II and partly reflecting tendencies which had their roots in earlier periods. The discussions of discrimination which took place at the London, Geneva, and Havana meetings of the International Trade Organization apparently reflected this division of opinion.[2] The hostility of many economists toward discrimination undoubtedly stems from experiences of the 1930's when it was used by Germany, for example, to exploit the nations in its economic sphere. In addition, American economists can hardly fail to be influenced in their thinking by the fact that at present U. S. commercial interests constitute one of the principal targets of discrimination. On the other hand, many economists, particularly those from Western Europe, feel that the outlawing of discrimination would lower the level of, and benefits from, trade unnecessarily for many years to come.

The Havana Charter reflects a compromise between these views—what might be considered a grudging sanction of the use of discrimination by those nations having balance of payments difficulties. It is provided that members of the ITO may introduce discrimination under either of two sets of conditions:

1. They may choose to discriminate "... in a manner having equivalent effect to restrictions on payments and transfers for current international transactions which that Member may at that time apply

* The author is a graduate student fellow, Russian Research Center, Harvard University. In the writing of this paper, he acknowledges benefit from the critical comments of Mrs. Barbara Solow and Mr. Robert Lichtenberg.

[1] Hereafter to be designated discrimination in distinction to simple price discrimination which will be so labelled whenever it is used.

[2] Clair Wilcox, *A Charter for World Trade* (New York, 1949), p. 90: "The negotiations through which these provisions were fashioned were among the most protracted and most bitterly contested at each of the conferences. Latitude for discrimination during the transition period was sought by the UK and by France. Rules to circumscribe discrimination were urged by the United States."

under Article XIV of the Articles of Agreement of the International Monetary Fund. . . "[3] In other words, discrimination is allowed to the extent to which members of the IMF would be discriminating already. It would have been difficult for the ITO to have ruled otherwise with respect to Fund members. Article XIV of the Fund appears to allow a fairly wide latitude for discrimination during the transition period.

2. Alternatively, members who signed the Geneva Protocol may elect to be governed by Annex K which allows discrimination subject to the following, among other, limitations:

> 1 (a) (i) levels of delivered prices for products so imported are not established substantially higher than those ruling for comparable goods regularly available from other Member countries . . . and that
> 1 (a)(iii) such action does not cause unnecessary damage to the commercial or economic interests of any other Member. . . .[4]

In view of the severity of the present trade crisis[5] some economists may consider these criteria somewhat too restrictive of the right to discriminate. Their reasoning will become apparent in light of the discussion which follows.

The Anglo-American Financial Agreement takes a much firmer position toward discrimination, outlawing its use, with minor exceptions in U.S.-U.K. trade.[6]

It should also be noted that although a nation may discriminate under the Charter while in balance of payments difficulties, "balance of payments difficulties" is not an independent variable but is a function

[3] Article 2 (Exceptions to the Rule of Non-Discrimination), *Havana Charter For an International Trade Organization,* March, 1948. See Section 1 (b), p. 59. Dept. of State reprint, pub. no. 3206, Commercial Pol. Ser. 114.

[4] *Ibid.,* pp. 60, 127.

[5] Particularly when these provisions were being discussed.

[6] Section 9 states: "If either the Government of the United States or the Government of the United Kingdom imposes or maintains quantitative import restrictions, such restrictions shall be administered on a basis which does not discriminate against imports from the other country in respect of any product; provided that this undertaking shall not apply in cases in which (a) its application would have the effect of preventing the country imposing such restrictions from utilizing . . . inconvertible currencies accumulated up to December 31, 1946, or (b) there may be special necessity for the country imposing such restrictions to assist, by measures not involving a substantial departure from the general rule of non-discrimination, a country whose economy has been disrupted by war, or (c) either government imposes quantitative restrictions having equivalent effect to any exchange restrictions which that government is authorized to impose in conformity with Article VII of the . . . International Monetary Fund. . . ." The exceptions do not appear very substantial: the first may have been of short-run value but it is doubtful that it remained operative beyond, say, 1948; the second appears designed to aid, not the discriminator, but third countries—and then only those which suffered war disruption, thereby excluding, for example, most of the sterling area; the third, by the nature of Article VII (the "scarce currency" clause), is likely to operate with considerable lag and, in fact, up to the present time has not been invoked in spite of the severity of the dollar problem.

of a number of alternative policies which may be pursued. In fact, much of the future battle over discrimination may well be fought over other issues such as exchange rate devaluation, internal fiscal and monetary reform, or the use of other "blunt" controls in place of discrimination. It clearly would be inconsistent to argue for devaluation or some other measure or combination of measures as a *complete* solution to present balance of payments difficulties and at the same time also support discrimination in the present period.

Few would deny that discrimination might be undesirable under "normal" conditions of trade.[7] However, in view of the disagreement as to the desirability of its use under conditions of the postwar transition period, it would appear useful to spell out some of the issues involved. An attempt will be made to define discrimination in a meaningful manner with respect to current problems, indicate some of its underlying assumptions, and the consequences of its application under different sets of conditions.

II. *Characteristics of Non-Discrimination*

Non-discrimination is characterized by the following:

1. "No prohibition or restrictions shall be applied by any Member on the importation of any product of any other Member *or* on the exportation of any product destined for any other Member country, unless the importation of the like product of all third countries *or* the exportation of the like product to all third countries is similarly prohibited or restricted. . . ."[8] In other words, all restrictions on imports or exports are to be applied proportionally to all nations concerned.[9]

2. Imports and exports apparently are treated separately by the ITO.[10] The Anglo-American Financial Agreement is concerned only with import restrictions.[11] The implication of this is that both imports and exports must necessarily be considered with respect to exchange for currency. In other words, the concept of non-discrimination apparently is based on price[12] and is not concerned with commodity terms of trade.

[7] Abstracting from dynamic considerations such as development of backward areas.

[8] *Havana Charter, op. cit.*, Article 22, Section 1, p. 57. The italicizing of *or* is my own to emphasize characteristic 2 below.

[9] See for example A. O. Hirschman, "Disinflation, Discrimination, and the Dollar Shortage," *Am. Econ. Rev.*, Vol. XXXVIII, No. 5 (Dec., 1948), pp. 886-91. He gives an example of how non-discrimination would work: ". . . Britain restricts purchases of books from Australia and of tobacco from Kenya . . . because the dollar shortage forces it to limit book and tobacco import from the U.S. . . ."

[10] *Havana Charter, op. cit.*, Article 22, Section 1, p. 57.

[11] See footnote 7 above.

[12] The term "price" is used here, and will be used in the remainder of this paper, to include all commercial considerations such as quality, transportation cost, etc.

3. In practice a nation accused of discriminating could clear itself by proving that it is purchasing in the lowest price market (or selling in the highest price market).[13]

Two aspects of discrimination deserve special mention.

First, it is not a purely quantitative restriction, but as indicated above, is defined with respect to price.

Second, partly as a result of this fact, there is a tendency to assume that discrimination in international trade is identical with domestic price discrimination. This viewpoint results in a blurring together of two quite different types of discrimination in international trade which we shall designate for the present: Type 1 and Type 2.

It will be recalled that the traditional monopolist (monopsonist) discriminating with respect to price, would separate his markets according to their elasticities of demand (supply), selling as dearly (buying as cheaply) as possible. Let us compare this operation with the two types of discrimination.

Type 1: Let A place quantitative restrictions on imports from B, but not from C. According to our definition, A importers would be paying a higher price for imports from C than the same commodity would cost in B (or they would not be discriminating). It could be argued that by placing quantitative restrictions on imports from B, but not from C, A is providing the separation of markets necessary to allow C exporters to price discriminate against its own importers. Type 1 discrimination is seen to be the inverse of traditional price discrimination.

Type 2: Although the application of the concept is clearly stated in terms of price, and consideration of export and import discrimination are handled separately, it may still be reasoned that commodity terms of trade are implied. It might be claimed that A has forced its importers to purchase at a higher than competitive price from C as part of a bargaining process designed to obtain a more than compensating premium on its exports to C.[14] This is the mechanism usually associated with the sort of bilateralism practiced by Germany in the 1930's. This operation is not identical with traditional price discrimination since it involves both imports and exports. Nevertheless, A is the analogue, in real terms, of the price discriminator.[15]

It will soon be apparent that the distinction between the two types of discrimination is a fundamental one.

[13] See, for example, Annex K, Section 1 (a) i quoted above.

[14] Or perhaps other economic, military, or political advantages.

[15] The relationship between A and C is perhaps better described as a bilateral monopoly in which one party (A) is stronger than the other (C).

III. *Rationale of Non-Discrimination*

Let us examine the conditions under which a policy of non-discrimination would be economically desirable.

Let us assume that the international market is characterized by flexible prices and exchange rates, convertibility of currencies, national parameters (*e.g.*, income, marginal propensity to consume, marginal propensity to import, etc.) of magnitudes such that trade is in balance, and generally competitive conditions. It is well known that under these conditions each nation will be "... somewhere on the Edgeworthian contract curve. . . ."[16] These points represent optimum efficiency in the sense that no further gains are possible to one nation which would not be at the expense of another.

Let us suppose that for economic, military, or political reasons, discriminatory quantitative restrictions have been imposed by a nation to prevent its traders from dealing equally freely in all markets. The immediate consequence would be a movement off the contract line for several of the nations. If these restrictions remained in force sufficiently long, a reallocation of the resources serving international trade might occur which (considered statically) could be considered less efficient than the distribution which existed when all nations were on the contract line. It can be argued that prompt enforcement of a policy of non-discrimination would tend to restore trade to its *original* "efficient" pattern. This is undoubtedly part of the economic rationale behind the non-discrimination clauses of the ITO, the Anglo-American Financial Agreement, and behind the reasoning of other economists of this school.

It should be noted that discrimination in this case would be Type 2 described above. A nation would not force its importers, under the conditions assumed, to purchase at a higher price than necessary unless compensating advantages on the export side were expected .

If we had started with simple monopoly, instead of competition, as our original pattern, equilibrium would not have been represented by a point on the contract curve. This position would therefore be considered "inefficient" since the satisfaction level of either party could be raised without detriment to the other. Nevertheless, the monopolist would be better off than under competition; and of course the other party worse off.

If the monopolist should decide to discriminate, there would be a tendency for equilibrium to be moved to a point nearer the contract line than under simple monopoly, falling on it in the case of perfect discrimination. The position of the monopolist would be improved again

[16] P. A. Samuelson, "Welfare Economics and International Trade," *Am. Econ. Rev.*, Vol. XXVIII, No. 2 (June, 1938), p. 265.

whereas the other party would be placed on a still lower satisfaction level.[17]

Since equilibrium under perfect monopolistic discrimination and perfect competition are both represented by points on the contract line and therefore are both "efficient," competition would appear preferable to perfect discrimination principally from the point of view of "distributive justice." Since simple monopoly is "inefficient," "distributive justice" must also be the criterion of those who prefer it to discriminating monopoly. "Distributive justice," therefore, would appear to be a second facet of the rationale of non-discrimination in international trade. Because of the impossibility of interpersonal welfare comparisons (in this case international comparisons),[18] economic science has had nothing to say on this matter in spite of its great importance.[19]

Discrimination is frequently objected to on the ground that it leads to bilateralization of trade, hence to a reduction in the benefits from trade due to loss of specialization. This will be true, as is well known, to the extent that the demand (supply) curves facing the discriminator are inelastic. Obviously if the demand for the discriminator's exports should be elastic in the markets in which he chooses to sell, competitors selling the same commodities or substitutes could cut in on his business.[20] In this respect the discriminator in international trade is limited to the same extent as the domestic price discriminator.

It is interesting to note that given the same degree of inelasticity domestically and internationally, the setting in which international discrimination is practiced differs from domestic discrimination in an important respect which serves to make bilateralism a *noticeable* concomitant of the former but not of the latter. International discrimination, particularly when state-inspired as is often the case today, usually involves a large number of commodities in each market—in comparison with domestic discrimination. On the assumption that the imports of any country have a limited expansibility, it follows that the value of the commodities sold to a nation on a discriminatory basis may be a relatively large percentage of its total imports. In extreme cases this may actually involve a cessation of trade between the country trading with the discriminator and some third nations. Since accounts in international trade are kept on a country-by-country basis this fact, *i.e.*,

[17] Under perfect discrimination, the second party would be at the lowest possible satisfaction level at which exchange could take place.

[18] The writer is aware of the theoretical shortcomings of community indifference lines.

[19] For an excellent graphic and verbal presentation of the competition-monopoly-discriminating-monopoly problem, see: W. Leontief, "The Pure Theory of the Guaranteed Annual Wage Contract," *Jour. Pol. Econ.*, Vol. LIV, No. 1 (Feb., 1946), pp. 76-79.

[20] Abstracting from the various economic and political devices used by discriminators to reenforce their positions.

bilateralization, becomes statistically recognizable. Although the same phenomenon exists domestically, it occurs on a relatively small scale and is not easily defined statistically.

Clearly, maintenance of the highest possible degree of specialization is a third aspect of the rationale of non-discrimination under the assumed conditions.

It should be noted that the preceding analysis is based on an assumption of constant output. It has been demonstrated, however, that under certain conditions output may be increased by discrimination.[21] If output should be increased sufficiently by discrimination, it is possible that everyone's position might be improved. To the extent that this should happen, the case for non-discrimination would be weakened.

IV. *Rationale of Discrimination*

Let us change some of our assumptions and examine the results. Specifically we will assume relatively fixed exchange rates and/or inflexible prices, national parameters such that trade is unbalanced, and inconvertibility of some currencies (largely as result of the preceding assumptions). These assumptions are not unreal under present conditions of world trade.

Under the conditions assumed, a soft currency nation may no longer allow its traders to buy or sell indiscriminately with regard to country (or currency) but must insure that certain of its international monetary accounts balance bilaterally (abstracting from capital movements). Let us suppose A has a deficit on current account with B and a surplus with C, and that B will not accept C's currency in settlement of its account with A. Let us furthermore suppose that A is buying identical commodities from B and C and that B's price is lower than C's. When A has exhausted its stock of B currency, it may impose quantitative restrictions on imports from B in order to achieve bilateral balance. These restrictions are discriminating within the ITO definition of the term. *But—it should be noted that this is Type 1 discrimination.* There is no necessary presumption in this case that A is paying more for its imports from C in the expectation of compensation in the form of a higher price for its exports to C, military or political gains, etc. A may be buying from C only because it no longer has the currency with which to purchase from B. *Type 1 discrimination is seen to be of*

[21] Joan Robinson, *Economics of Imperfect Competition* (London, 1945). In her section on price discrimination, Mrs. Robinson demonstrates that if a monopolist is faced with separate markets of different demand elasticities, and if the more elastic demand curve is more concave than the less elastic demand curve, ". . . the total output will be greater under discrimination than under simple monopoly . . ." (p. 193). Her analysis also indicates ". . . that on the whole it is more likely that the introduction of price discrimination will increase output than that it will reduce it . . ." (p. 201).

an "induced" nature in distinction to Type 2 which is practiced at the initiative of the discriminator and may be designated "autonomous" discrimination.

The principal importance of the distinction between induced and autonomous discrimination resides in the fact that whereas with the former, disequilibrium in trade precedes and is the cause of discrimination, with the latter, discrimination is not a result of disequilibrium but is used deliberately by the nation discriminating to better its terms of trade or obtain other concessions at the expense of other nations. It was demonstrated above that enforcement of a policy of non-discrimination would make it possible to prevent an autonomous discriminator from separating his markets and thereby tend to restore trade to its original pattern. Application of this policy, however, to induced discrimination would not have the same therapeutic effect. It is well known that under the conditions assumed the induced discriminator could not return to the same level and distribution of trade which existed prior to discrimination. If balance of payments equilibrium could not be achieved by discrimination, downward adjustment of trade on a multilateral scale would become necessary. This would serve to reduce the benefits from trade to the discriminator and to all other nations with whom it might have enjoyed a higher level of bilateral trade by discriminating—and without benefit (at least in the short run) to the country discriminated against. It does not seem necessary to more than state that the losses from the reduced level of trade would be sufficiently large in most instances to transcend considerations of distributive justice and of the specialization effect.[22]

[22] As was indicated in the introduction, one of the principal purposes of this paper is to clarify the rationale of the use of discrimination in the transition period, particularly since the American delegations to the ITO and the framers of the Anglo-American Financial Agreement appear to have favored non-discrimination even under the conditions of transition.

The analysis would appear to be even more significant, however, in view of the fact that many economists feel that inconvertibility is a function solely of relative prices and can, therefore, be quite simply eliminated by "effective" devaluation. (See for example: F. Graham, "The Cause and Cure of 'Dollar Shortage'," *Essays in International Finance* [Princeton, 1948], p. 5.) If this were true, the case for induced discrimination in the present period would be refuted and discounts and premiums on currencies would be eliminated quite simply.

The elimination of inconvertibility, however, appears to be a much more complicated task, in some instances, than is generally assumed. For example, sterling inconvertibility is a function not only of (1) international price disequilibrium, but also of (2) the huge external sterling debt built up during the war, a sufficient proportion of which cannot be discharged quickly enough out of current production, (3) the shift in terms of trade between industrial and agricultural areas, (4) the increased marginal propensity to import resulting from the redistribution of income toward the poorer classes in the U.K., (5) and others. Achievement of immediate sterling convertibility would probably involve the U.K. in reduced home consumption and/or reduced domestic investment and/or repudiation of at least some portion of the external sterling debt. The consequences for the U.K. in terms of

It must be recognized that to defend a policy of non-discrimination with respect to induced discrimination at present or in the near future, especially in view of the immediate loss it would entail from a lower level of trade, it would be necessary to defend the particular distribution of trade which the policy tends to preserve, *i.e.*, the distribution of trade in some ". . . previous representative period, due account being taken of any special factors which may have affected or may be affecting the trade in the product. . . ."[23] This would indeed be difficult to do. The distribution of trade in the postwar period has been very abnormal because of war destruction and because of the large drawing down of liquid reserves by many nations and the extraordinary capital outflow from the United States in the forms of UNRRA, Marshall Plan and military lend-lease aid. For obvious reasons the wartime period is unfit to serve as a base period. The extraordinary structural changes which have been (still are) taking place since the interwar period[24] make it unwise to go back this far. In other words, there is actually no "representative period" upon which to base a policy of non-discrimination. This substantially vitiates the use of such a policy until the time when the current maladjustments in trade have disappeared.[25]

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the morale and incentive to work of its population, future ability to compete in world markets, domestic cost-price stability, and commercial relationships with its war creditors might be serious enough to endanger its recovery program. The alternative might be to tolerate inconvertibility until such time (perhaps 5-10 years) as productivity has risen, repressed inflation has subsided, agricultural prices have declined relatively to industrial prices, and other internal adjustments have ocurred which would make the transition to convertibility less fraught with danger. This latter alternative would not necessarily preclude devaluation sufficient to bring British export prices into line with world prices (this would probably not be sufficient to close the deficit on current dollar account, however) although the advisability of such a devaluation at this time is still a controversial matter.

For discussion of structural disequilibrium see: J. J. Polak, "Exchange Depreciation and International Monetary Stability," *Rev. Econ. Stat.* Vol. XXIX, No. 3 (Aug., 1947), pp. 173-82; P. A. Samuelson "Disparity in Postwar Exchange Rates, *Foreign Economic Policy for the United States*, edited by S. Harris (Cambridge, 1948), pp. 399-400.

[23] *Havana Charter, op. cit.*, p. 58.

[24] For example: full employment in many countries today in comparison with the depressed conditions of the 1930's, redistribution of income in some nations, development of synthetics, war destruction, etc.

[25] It is noted here that the ITO emphasizes the distribution, to the neglect of the level, of trade. Professor Frisch's trade matrix in its *unadjusted* form, goes to the other extreme, as Dr. Polak has indicated. (See his "Balancing International Trade: Comment," *Am. Econ. Rev.*, Vol. XXXVIII, No. 1 [March, 1948], pp. 139-41.) The matrix is essentially a balance sheet of current account relationships of each country with every other—in monetary terms. Apparently the marginal units of trade from all nations are treated as having equal desirability to all other nations ignoring the importance of the distribution of trade. Professor Frisch does state that ". . . In practice one would have to consider all sorts of special relations that connect the elements in a given trade matrix . . ." ("Forecasting a Multilateral Balance of Payments," *Am. Econ. Rev.*, Vol. XXXVII, No. 4 [Sept., 1947] p. 545). It is possible that such a procedure would meet the objection posed. It should also be noted that nowhere in the article was there any indication that adjustment would be made for

Finally, it should be noted that with currencies not freely convertible, and rigidities in international prices and exchange rates, some currencies will tend to be "harder" than others. Unless exchange rates and/or domestic prices fluctuate freely, a value expressed in international prices will not always be equivalent in all currencies. That is to say, although the real value of currencies in terms of each other (or gold) changes, the legal parities are not allowed to change freely. In this case, a country (or its traders) clearly cannot determine in which direction the most economic purchases can be made on the basis of market price expressed through parity rates. Consideration must also be taken of the current discounts or premiums on the currencies earned or held.

Let us suppose that A forces its importers to buy from C a commodity which is being sold by B at a 10 per cent lower price. Under the ITO definition of discrimination it could be claimed that A is discriminating against B. However, if C's currency exchanges at a 25 per cent discount with respect to its par value with B's currency, it is clear that A is not discriminating. Actually, the cost in currency of B's product is 20 per cent higher than C's; and, of course, cost in currency is the relevant measure under the assumed conditions. Any evaluation of discrimination should take this factor into account.

V. *Conclusions*

The following conclusions are suggested by the preceding analysis:

1. Autonomous discrimination may occur under conditions otherwise appropriate to multilateral trade. It is undesirable because it reduces the specialization effect and involves what may be considered an "unfair" distribution of the gains from trade. Enforcement of non-discrimination was seen to provide an adequate corrective. For these reasons it may be argued that a policy of non-discrimination should be enforced with respect to nations guilty of autonomous discrimination.[26]

2. This reasoning was shown to be inapplicable to induced discrimination because of the different set of conditions under which it occurs. Consequently, the ITO's general position of allowing discrimination in

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discounts on currencies. (See next paragraph in text.) Other criticisms of the method have been published (see Dr. Polak's article above; also: G. M. Meier, "The Trade Matrix: Comment," *Am. Econ. Rev.*, Vol. XXXVIII, No. 4 [Sept., 1948], pp. 624-25).

However, in spite of its defects, Professor Frisch's work is very significant in that it attempts to answer the question: how to discriminate? and thereby facilitate progress in the recovery. The ITO, on the other hand, has made no contribution to this important problem of the transition period. Rather it has devoted its efforts to setting up rules for the post-transition period apparently on the assumption that transition problems will take care of themselves.

[26] Abstracting from certain dynamic considerations.

the use of quantitative restrictions during the transition period was shown to be justifiable on economic grounds. The limitations on discrimination imposed by Annex K of the Havana Charter do not appear to be justifiable by the same logic. If one accepts the reasoning that discrimination in the transition period is "induced" by structural disequilibrium in trade, then it may be contended that the characteristics of the induced discrimination will be determined by the nature of the disequilibrium, and should not be limited by arbitrary "price" and "quantity" criteria.

The exceptions to the non-discrimination clause of the Anglo-American Financial Agreement appear to be insubstantial and the clause, therefore, not defensible on economic grounds.[27]

3. If a policy of non-discrimination should be enforced during the transition period, it must be recognized that market prices in local currencies, converted at parity, do not provide a valid measure of relative cost. Currency discounts and premiums must also be taken into consideration if the policy is to have any economic significance at all.

4. The ITO has made no attempt to solve the problem of how to discriminate in the transition period. This is a serious gap since the problems of the transition are quantitatively so much more important than those of the post-transition period are likely to be. In addition, there is no guarantee that the present crisis may not continue in some sectors for many years.

Ideally the ITO should undertake, in cooperation with its members, extensive studies as to the optimum levels and distribution of trade to be expected at the end of the transition period. Discriminatory restrictions which are in consonance with, and necessary to the achievement of end-of-transition equilibrium should be allowed. It must be recognized that many nations are presently planning trade to a greater extent than ever before and with long-run ends in view. ITO coordination of the international aspects of this planning would be invaluable.[28]

[27] The events of July-August, 1947, showed the fallacy of the premature resumption of sterling convertibility under the terms of this same Agreement.

[28] A study of U.S. imports should have high priority on the list of research projects. The difficulties faced by foreign countries attempting to increase export to the U.S. are great. The U.S. is the most efficient and self-sufficient of nations. About two-thirds of its imports consist of food, and raw and semi-finished materials; half of the remainder, of manufactured consumer goods.

It is likely that imports of the former group can be increased much. Developments such as the invention of synthetic rubber, the improved tin-plating process, mechanization in beet sugar, etc., make it more likely that these imports will tend to decline relative to income. Studies show the U.S. elasticity demand with respect to the price of these commodities is very low.

The difficulties faced by foreign manufacturers trying to increase exports of consumer goods to the U.S. are great. The U.S. domestic industry is an efficient competitor in most existing lines (including close substitutes). Attempts to create new markets are almost

Less than ideally, the ITO might attempt to develop, or support efforts, in the general direction in which Professor Frisch has been working. Any mechanism which is clearly an improvement over current practice of unilateral discrimination should be incorporated into, and enforced by, the ITO.

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certain to have to face competition eventually from American emulators. For example, Professor Williams says that American automobile manufacturers have told him that if other nations succeed in establishing a market in the U.S., "... we will go after it. . . ." (J. Williams, "Europe After 1952," *Foreign Affairs*, April, 1949, p. 19). In those fields in which foreigners appear able to compete successfully with domestic firms, the U.S. provides high tariff protection. Foreign firms attempting to crack the American market always face the risk that tariff walls may be raised against them if they are "too successful"—although this risk may be substantially reduced by GATT and the ITO. It must also be remembered that the present allocation of resources to U.S. industries competing with foreign products is based on a long-standing policy of protection and cannot be easily changed.

In addition, American business men are more conversant with American tastes and more skilled than foreigners in the arts of advertising, packaging, styling, etc., for the American public. This raises the costs both of entry and of continued competition for foreign firms. Subsidies by foreign governments designed to overcome such handicaps, even initially, are infeasible since the Tariff Act of 1930 provides for the levying of countervailing duties to the full extent of such subsidies.

There is no question but that American goods have a higher utility for foreigners than the exports of any other country. Offsetting this, however, increased exports to the U.S. may be costly in view of: (a) poorer terms of trade which appear unavoidable (b) the costs of investment, advertising, etc., needed for better orientation toward dollar markets, and (c) risk of U.S. recession or higher tariffs and consequent loss of markets.

INTERNATIONAL ASPECTS OF A RECESSION

By ALBERT O. HIRSCHMAN*

The present paper is concerned with the end of the world-wide postwar inflation and with its implications for the "dollar shortage." In its first part, the stability of foreign economies will be examined, with particular reference to those of Western Europe. The second part deals with the probable consequences of a cyclical downturn for international economic equilibrium.

I. *The Stability of Foreign Economies*

Up to the middle of 1949, signs of a recession are fewer and less conclusive in foreign countries than in the United States. More and more countries, however, are achieving stabilization regardless of whether they have been suffering from the "open" or the "repressed" variety of inflation and also regardless of the kinds and the degree of control under which their economies have been functioning.

Incentives to invest have been particularly strong in all war devastated countries not only because of the large backlogs of consumer demand and the need for re-equipment in capital goods, but because relatively small amounts of investment (repairs of houses, railroads, replacement of damaged or outworn machinery) were sure to yield an exceptionally quick and high return. Once this abnormal demand for investment comes to an end, a rather severe readjustment may be expected. This type of readjustment did take place in 1947-48 in Italy where the completion of the most urgent repairs coincided with restrictionist monetary policies which killed the speculative, inflation-induced type of investment. The other marked instance of a postwar recession is Belgium where war destruction had not been important and where the government followed a policy of giving primary attention to the filling of consumers' needs.

Spotty evidence of slackening consumer buying has been available in most Western European countries over the past months. Investment pressures have eased considerably in Sweden and Switzerland, complaints about lagging investments are common in Germany and Italy, and a number of large-scale reconstruction and re-equipment programs, particularly in the field of transportation (shipbuilding in England,

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railways in France and Italy, and truck production in Western Europe in general), are nearing completion.

In many countries the public authorities have elaborated investment plans which so far they have had the greatest difficulty in financing without inflation and which, therefore, might be expected to prevent any tendency toward a depression. It is by no means certain, however, that everything will work out in this way. Many European countries have now made a considerable fiscal effort to create the savings necessary to offset the planned investment. But this investment, to a very large extent, is carried out by the private entrepreneur. At some point, it may simply not be forthcoming in the volume expected and then, provision having been made for it by budget surpluses, selectively restrictive bank credit policies, etc., there would be an ideal setting for a deflation. What needs to be pointed out, therefore, is that the present semi-planned economies of Western Europe have by no means achieved a reliable coordination of savings and investment decisions. Of course, in the past inflation-ridden years, investment projects have repeatedly been subjected to cuts which would presumably be restored as demand recedes. But the feeling of security induced by this consideration may well prove to be illusory, for an entrepreneur who very much wanted to undertake an expansion of his plant a year ago may feel quite differently about such a project when the inflation around him has subsided or turned into deflation.

Even nationalized industries cannot be entirely relied upon to undertake investment programs when a recession has started to set in. In the first place, these industries have already invested at a very high rate during the recent inflationary phase, so that all that might be expected from them is the continuation of the present rate. Moreover, the managers of these industries have been told so insistently over the past years that they should use ordinary business judgment and criteria that, at least during the initial phase of a recession, they may well postpone investments when business in general adopts a wait-and-see attitude.

Another uncertainty affecting business activity in European countries is the level of individual savings. The general inflationary climate and the uncertainty about the prospective level of private savings has led, in a number of countries, to an extremely limited reliance on personal savings as an offset to the planned level of investment. All other forms of savings, such as corporate savings and budget surpluses, seem far superior in that they are more enforceable, *i.e.*, they are less forecasts, which may or may not become true, than targets which can consciously be aimed at by economic policy.

Thus, in France the "inflationary gap" was calculated in 1947-48 on the assumption of zero personal savings.[1] In Great Britain, the 1948 estimate of private savings was 220 million pound but this consists, to the extent of 214 million, of direct taxes on capital.[2] In countries like Norway and the Netherlands the national accounts were actually drawn up on the assumption that there would be a certain amount of net dissaving by private individuals.

It goes without saying that a zero or negative level of personal savings is an anomaly caused by exceptional backlog demands or by inflation. When the backlog demands are filled, when the inflation is stopped and excess liquid holdings have been reduced, a sudden reappearance of private savings on a substantial scale is possible: it is quite likely to take the official planners by surprise.

What policy will or should European countries follow when they are faced, despite planning for full employment, by a recession resulting from over estimates of private investment and underestimates of private savings? As long as inflationary tendencies prevail, the task of the authorities is clear enough, though by no means easy to carry out. The weapons to be used are the familiar ones of restrictive fiscal and monetary policy, supplemented if necessary or advisable, by the use of negative or veto controls over private investment.

Novel problems arise, on the other hand, when individuals are suddenly found to save again, and when private investment ceases pushing incessantly against the limits which have been assigned to it in the total investment program, but starts to fall short of these limits. For a number of reasons it appears unlikely that foreign countries in general, and those of Western Europe in particular, will be able or ready immediately to counteract such developments. In the first place, a mere reversal of the policies followed during the inflationary phase such as, for example, the lifting of credit and investment controls, may be ineffective in reviving demand. Secondly, in countries where inflations have been protracted and violent, the authorities may prefer to err on the side of disinflation, at least for a while. This may be sound policy also because such inflations presumably have given rise to considerable misdirection of resources which ought to be corrected. Finally, and most important, the trend toward recession brings almost automatically a certain improvement in the foreign exchange position of the countries concerned and their authorities will, therefore, hesitate to take "compensatory" measures which are likely to re-create the same degree of

[1] Commissariat General du Plan de Modernisation et d'Equipment, *Perspectives des Ressources et des Besoins de l'Economie Française* (Paris 1947), p. 73.

[2] *The Economist*, April 9, 1949, p. 669.

dollar shortage as existed prior to the onset of the adjustment process. Clearly, the loosening up of the labor market and of resources in general ought to be taken advantage of in order to carry out a reorientation toward export industries (or toward activities providing domestic substitutes for imports).

Economic policy, therefore, will not be concerned solely with the restoration of a sufficient aggregate of effective demand. Balance of payments preoccupations will probably rule out indiscriminate "reflation" with its reliance on the automatic working of the multiplier, and will rather point to the necessity of specific direction of the re-expansion process. But the official investment planning seems to be efficient mainly in expanding the so-called basic sectors of the economy (energy, transportation, iron and steel). With the exception of some large-scale industries, such as petroleum refining and shipbuilding, the official planners do not seem to have been very successful in planning directly for the expansion of exports, not to speak of their direction. This may be a field where exchange rate adjustments, which would render exporting attractive to business, could play a useful rôle not only in immediately producing greater balance of payments equilibrium, but also in generating and guiding a new investment wave.

The present uncertainties about the future course of business activity in European countries make it necessary to re-examine Economic Cooperation Administration policy concerning the so-called counterpart funds which derive essentially from the sale of ECA-financed commodities within the countries receiving aid. Hitherto the United States power over the use of these funds was used primarily to fight inflation, either directly by withholding them from current spending, or by making release dependent on effective anti-inflationary action. With deflationary tendencies outweighing inflationary pressures a reversal would consist in stopping debt retirement programs which are followed in a number of countries and in supplementing releases by additional expansionary action by the foreign governments. But in view of the undesirability of a policy of indiscriminate reflation, such a simple about-face would in general not be adequate; it will be necessary for the ECA to make sure that spending of counterpart funds does not promote short-run recovery from recession at the expense of impeding longer-run recovery from the dollar shortage.

II. *International Repercussions of a Recession*

In examining the implications of a recession for international balance of payments equilibrium, we shall assume at first that a downturn occurs only in the United States while other countries continue to enjoy a high level of economic activity.

Effects of a Recession in the United States Only

This is almost a classical case by this time, for most discussions about appropriate postwar international economic policy have taken this situation as their starting point. It generally was assumed that a fall in U. S. demand would produce balance of payments difficulties abroad, and an international equivalent to the theory of internal compensatory fiscal and monetary policies was elaborated by such writers as Nurkse and Triffin. In such a situation, it was propounded, it would be wrong for the affected countries to "play the rules of the gold standard game" and to contract money and income. On the contrary, international currency reserves ought to be freely spent and the contractive domestic effect of the outflow properly counteracted so as to avoid spreading the deflation and intensifying it in the United States. This analysis is based on two assumptions: First, that there is an approximate balance in international economic relations before the start of the recession; second, that the countries whose balances of payments deteriorate as a result of the recession have reasonably ample foreign exchange resources—either as central bank reserves or as readily available drawings on the International Monetary Fund. We shall now explore the implications of the fact that neither of these assumptions is valid under present conditions.

A depression in a leading trading country is practically certain to create balance of payments problems for its trading partners only if its balance of payments is in approximate equilibrium at the time a recession sets in; but if that country already maintains a considerable export surplus before the onset of the recession, the same proposition does not necessarily hold. The reason for this is quite elementary. A recession starting in the United States will lower the volume and prices of American imports, but it will also decrease the price of American exports. In a situation where this country maintains a huge export surplus the latter factor could easily outweigh the former, *i.e.*, the dollar savings accruing to a foreign country from the fall in import prices could well exceed the loss sustained by the shrinkage of its exports.

This reasoning ought to apply with particular force to the countries participating in the European Recovery Program since in 1948 they still exported to the United States only about one-fourth of their purchases in this country. The 1947 Survey of the Economic Commission for Europe had shown how close to one-half of the increase in Europe's balance of payments deficit from 1937 to 1947 was due to the increases in world prices, quite apart from any deterioration in the terms of trade.[8] A recession with its decline in dollar prices could corre-

[8] Economic Commission for Europe, *A Survey of the Economic Situation and Prospects of Europe* (Washington, 1948), p. 60.

spondingly improve Europe's international position even though the volume of its exports to the dollar area were to be somewhat reduced.[4]

If the above consideration is valid, a recession in the United States could cease to be an unmitigated evil for foreign, and in particular for European, economies. Nevertheless, much relief cannot be expected in this fashion if only because rather narrow limits are set through legislation to a fall in American export prices in the area where it would do Europe most good, that is in agriculture.

Furthermore, a fall in the world price level would profit Europe only if three conditions are fulfilled: (1) the fall in the volume of European exports must not be such as to wipe out the dollar savings obtained through the fall in import prices; (2) the volume of Europe's imports must be held in check in the face of the decline of their prices; and (3) the amount of financial aid must not diminish concurrently with import prices.

It is easy to see that these conditions are only partially met.

In the first place, the United States income elasticity of demand for European exports is likely to be high since Europe exports to the United States a large proportion of luxury and semi-luxury articles.[5]

With regard to the volume of imports, European economies may be relied upon not to expand their imports merely in reaction to price declines. But a tendency toward an increase in the volume of European imports from the United States could nevertheless be expected to assert itself once the domestic sellers' market in the United States had changed into a buyers' market. For this development would permit foreign countries to obtain items previously reserved for domestic consumers and would speed up delivery schedules of American manufacturers for foreign orders of machinery and equipment.

[4] The present paper was written in April 1949, before the outbreak of the new British dollar crisis. This crisis may be held to contradict the view that a mild U. S. recession would not necessarily be unfavorable for the balance of payments position of a country receiving large amounts of American aid. It is highly misleading, however, to explain the loss in British reserves primarily by a decline in U. S. purchases, in other words by the recession in the United States. The main causes of the deterioration in Great Britain's external position during the second quarter of 1949 were rather various capital transactions and increased imports by the United Kingdom and other sterling area countries. The dollar losses incurred by the decline in U. S. purchases of sterling area goods would have been largely compensated by the savings effected through the decline in prices of U. S. exports to the sterling area provided the volume of these exports had remained constant. Moreover, in 1948, the sterling area covered two-thirds of its imports from the United States by its exports, and this relatively high percentage places it outside the class of countries (such as France, Italy, Germany) to which our argument applies with particular force.

[5] See Randall Hinshaw, "Prosperity, Depression and the British External Problem" in *Foreign Economic Policy for the United States*, Seymour E. Harris, ed., (Cambridge, Mass., 1948), p. 84, for data on the high income elasticity of demand for British products in the United States.

The third condition for a price fall to result in balance of payments relief for deficit countries is a *ceteris paribus* with respect to U. S. aid. The continued existence of sizeable foreign aid programs during the current readjustment is a substantial safeguard against an international spread and deepening of a recession just as the abrupt end of private U. S. lending at the onset of the Great Depression had then an important intensifying effect. Nevertheless, there are certain limitations to the extent to which foreign aid outlays may be relied on as a stabilizing factor. In the first place, the emphasis on the real or commodity aspect of our aid tends to provoke curtailments of the dollar amount of aid made available when prices fall. Beyond this technical consideration, it is already apparent that a recession in the United States may bring about a decreased willingness to maintain our foreign aid programs although at least a slowing down of the scheduled progressive reduction in these programs may be called for from the point of view of business cycle policy.[6]

All in all, it appears therefore more than doubtful that the European countries will obtain much relief from a recession in the United States. All that may be affirmed is that the countries receiving large-scale U. S. aid are likely to fare better in a recession than those countries that obtain their dollars primarily by selling goods and services to the United States. The latter countries will feel the full impact of the fall in American demand, and they are quite unlikely, under present circumstances, to apply the policy of freely spending their dollar reserves. Over the past years, all countries have become conscious of the dollar problem and of the desirability to husband their scant remaining dollar resources. A country that sees its dollar deficit increase because of reduced American purchases would immediately retaliate against American exports.

It would seem, therefore, that, in the event of a recession, we would have a special responsibility with respect to those countries that so far have received their dollars primarily through trade channels rather than in the form of U. S. aid. Moreover, it may be in our own interest to see to it that immediate curtailment of their imports from the United

[6] If it is assumed, of course, that the federal budget ought to be in balance under all circumstances, then it is possible to argue, as has been done during recent Congressional debates, that our foreign aid programs are not inflationary—the contention of 1947-1948—but deflationary since they make necessary a greater tax burden than would be required otherwise. This argument would be particularly strong if it is found that the recipient countries do not actually spend all of the aid received, but accumulate an important fraction of it in the form of additional reserves. To tax the American consumer in order to permit foreign Central Banks to hold idle dollar balances would indeed be purely deflationary action. For this reason, stabilization loans ought to be financed through public debt transactions or through direct banking operations rather than through appropriations.

States in retaliation for decreased exports to the United States is avoided or minimized.

Effect of a Recession in Foreign Countries

It was stated in the preceding section, that under present circumstances a recession arising only in the United States could have less unbalancing effects on foreign economies than was generally believed. This statement would need to be less surrounded by qualifications if it is assumed that simultaneously there is some disinflation in foreign countries.

For the purpose of our analysis it would be tempting to distinguish two components of the dollar shortage: a "monetary" one which would designate the external consequences of the condition of "open" or "repressed" inflation which has characterized European, South American, and other economies since the war; and, secondly, a "structural" component which would express the needs for temporary outside financing required to attain a certain level of productivity while maintaining a socially necessary standard of living. Unfortunately the line of distinction between the two components cannot be drawn with any precision. Inflation often involves a special balance of payments drain caused by capital flight, by wasteful investment, and by failure to export; but it is impossible to tell how big this burden is in relation to the total deficit. Moreover, it is likely that a prolonged inflation cannot be stopped without provoking a downturn and without thereby doing away with part of the "structural" component of the dollar shortage, in addition to the monetary one.

In such a situation the need for aid dollars will probably decrease suddenly and situations may arise in which a foreign country is actually unable to absorb foreign aid in the amounts available.

Conditioned as we already are to a general dollar shortage, such inability to absorb aid almost strikes us as something against nature, but it is of course not any more perverse than the inability of an economy to make reasonably full use of its manpower and machinery. A very striking example of this type of situation has been given by Italy which has accumulated in the form of additional reserves of gold and foreign exchange close to one-half of the aid received in 1948-49. This has been done indirectly, of course (*i.e.*, by not using the dollar proceeds of its exports), since ERP dollars are necessarily tied to commodity imports, even though not to imports from the United States. The accumulation of reserves has been largely the result of the stabilization of the Italian internal situation combined with the adoption of a more realistic exchange rate than prevailed elsewhere in Europe.

Similar instances of inability to absorb aid and of accumulation of

foreign exchange reserves have been encountered in other countries where symptoms of a recession have appeared, such as Germany and Belgium. These examples serve to show that our view of a gradual and regular tapering off of the need for aid may be based on the unrealistic assumption of a world where planning is perfect and business cycles are non-existent. After the immediate reconstruction period when war damage is largely repaired, when pipelines are refilled, when some of the most important deferred demands in both consumption and investment are satisfied, and when the monetary overhang has been worked off in one way or another, many foreign economies are likely to pass through a period of adjustment during which their needs for foreign aid may be smaller than in a subsequent period when a new cycle of investment is undertaken. But the very fact that we have not made any provision for cyclical changes in determining the need for aid may help in the overcoming of foreign recessions. For the accumulation of dollars on the part of a foreign country experiencing a recession and the realization that it may well face a cut in aid if the accumulation continues may yet cause it to throw caution overboard and to undertake vigorous anti-deflationary action.

Thus it becomes possible to distinguish three postwar stages in the interaction between internal and external disequilibrium. It cannot be denied that to a certain extent during the immediate postwar period an inflation carried with it a dollar premium.[7] In a second period, as the volume of our aid shrank, anti-inflationary policies gained in attractiveness since they permitted foreign countries to absorb the decrease in our aid with a minimum of internal stresses. In a third period, the competition for the dollars made available by us may yet become a powerful factor in avoiding any prolonged recession of foreign economies. This would be a new and possibly quite valuable mechanism: so far, every country that in a depression made faster progress than the rest toward recovery was penalized by experiencing a strain in its balance of payments and a loss in reserves. Now, with the resulting deficit being made good by dollars contributed by the United States out of a limited amount of aid, the penalization would be changed into reward.

[7] It is not implied that foreign countries have willfully engineered inflation in order to become "eligible" for U. S. aid. An inflation is far too much fraught with social and political dangers for it to be provoked lightly by any government. In so far as inflations have resulted from positive action, rather than from omissions, on the part of national governments, they have been due to overambitious investment and development programs, rather than from any conscious attempt to capture a larger share of U. S. aid than would have been obtained otherwise.

THE THEORY OF PRICE OF STORAGE

By HOLBROOK WORKING*

The theory here considered is an attempt to solve a problem presented by conflict of accepted theory with observed price behavior. It seems to have important implications regarding consequences of futures trading, and to throw some light on the general subject of effects of economic expectations. The problem arises out of evidence on *inter-temporal price relations*, and we must first take time to get a clear view of the essential facts which must be comprised in a theoretical formulation.

I. *The Problem*

Inter-temporal price relations are here defined as relations *at a given time* between prices applicable to different times. For examples, one may take the relation at a given time between a spot price and a forward price for the same commodity; or one may take the relation between two forward prices, such as the relation between prices of the December and the May wheat futures, or the May and the September futures, at a given time.

We exclude from "inter-temporal price relations" the relation between price today and price at some previous date, or the relation between prices at two previous dates. Such relations are not relations between simultaneously quoted prices applicable to different times; they express price *changes* which occur through time, and may best be characterized simply as price changes. They are brought into relation only by the artifice of a statistical table or chart.

It has been customary to regard an inter-temporal price relation as commonly a relation between two substantially independent prices. For example, if the price of September wheat is quoted in April at 15 cents per bushel below the simultaneous quotation for the May future, the customary explanation has been that the relatively low price of the September future reflects expectation of a large wheat harvest, which will depress the price of wheat by September, but which (so the explanation runs) cannot affect the price of wheat in May.

Now empirical investigation has shown this explanation to be wholly

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mistaken. In the first place, the amount by which the price of the September future is discounted relative to the May future *does not* depend on the expected size of the crop to be harvested between May and September. In the second place, it is *not* true that expectations regarding the coming crop can have no effect on the price of the May future; on the contrary, expectations regarding the harvest which will occur after May affect the price of the May future in approximately the *same* degree as they affect the price of the September future. Sometimes, indeed, changes in expectations regarding the coming crop seem to affect the price of the May future *more,* in cents per bushel, than they do the price of the September future. There seems to be some tendency for the relation between the two futures to remain constant in *percentage* terms, if nothing happens except a change in expected size of the new crop. Suppose, for example, that in early April the price of September wheat is $1.50 per bushel, and the price of May wheat is 10 percent higher, at $1.65. Now suppose that serious crop damage is thought to be detected during April and the price of September wheat rises to $1.80; the price of May wheat may very well rise to about $1.98, maintaining the former percentage relation to the price for September delivery, but actually rising 33 cents, under the influence of supposed crop damage, where the rise in price of the September future was only 30 cents.

The foregoing statement of fact is based on empirical studies which have attacked the question from other angles besides the one suggested above.[1] The results from all lines of investigation concur in indicating that prices quoted at one time, in a futures market, for two different dates of delivery, stand in a relation which in general *does not* reflect expectations regarding events that may occur between the two delivery dates. This conclusion holds whether the dates lie in separate "crop years," as in the example considered above, or in the same crop year.

What, then, *are* the influences which determine inter-temporal price relations? In the example considered above, a true explanation would be that the price of May wheat (in April, let us say) is above the

[1] See the following publications, issued under *Wheat Studies of the Food Research Institute*: "The Post-Harvest Depression of Wheat Prices,' November 1929, VI (1); "Price Relations between July and September Wheat Futures at Chicago since 1885," March 1933, IX (6); "Price Relations between May and New-Crop Wheat Futures at Chicago since 1885," X (5); "Price Relations of Liverpool Wheat Futures with Special Reference to the December-March Spread," XVII (3). All are by the present author, the last in collaboration with Sidney Hoos. Some theoretical implications of the findings other than those considered here are examined, and more detailed citation of evidence is given, in "Theory of the Inverse Carrying Charge in Futures Markets," *Jour. Farm Econ.*. Vol. XXX, No. 1 (Feb., 1948), pp. 1-28, and "Professor Vaile and the Theory of Inverse Carrying Charges," *Jour. Farm Econ.*, Vol. XXXI, No. 1 (Feb., 1949), pp. 168-72, also by the present author.

price of wheat for September delivery because the *last* crop was small (perhaps the carryover from still earlier crops was small also, contributing to the effect). So far as supplies are concerned, it is only supplies *already in existence* which have any significant bearing on a current inter-temporal price relation of this sort.[2]

This statement of fact poses the theoretical problem to which we now turn. How shall we account for the observation that it is existing supply rather than expected change in the supply which is involved in determining inter-temporal price relations? The answer is easy for one set of circumstances, which we may consider first.

II. *Clear Aspects of the Theory*

The theory of inter-temporal price relations is simple and has long been fairly well understood so far as concerns the condition of large supplies, involving stocks which must be carried from one date to another in such volume that direct economic reward must be offered for the service of stock-carrying. In those circumstances, relations between prices for delivery at the two different dates are commonly regarded as depending on the "cost" of carrying the stocks. This is a condition which has often existed for wheat in the United States as regards the relation between prices for December and for May delivery. It is commonly said, with approximate accuracy, that in the presence of abundant supplies the price for May delivery tends to be the price for December delivery plus the cost of storing wheat from December to May. At various times in the past supplies have been so large that even the relation between the price for May delivery near the end of one crop-year, and the price for delivery in the subsequent September following a new harvest, seemed clearly determined by the cost of storing wheat over the interval.

This theory of inter-temporal price relations under the condition of abundant or super-abundant supplies has the defects common to all cost theories of return for an economic service. If the return for a service is determined freely and competitively, it will vary according to demand and supply conditions. Such is the case with returns for storage of wheat. If stocks to be stored are exceptionally large, the return for carrying wheat may exceed the "cost" of storage, as conventionally calculated. If stocks are quite moderate, competition among firms with storage facilities tends to result in the storage being provided for a rather small return per bushel.

[2] In some special cases this statement is subject to minor qualification, but the cases are such as have not been found in the United States wheat market. The basic theory of inter-temporal price relations must be founded on conditions such as are described in the text and then elaborated, if necessary, to cover conditions of more complex character.

This amendment of the theory first described above leads to explaining inter-temporal price relations under the pertinent conditions as determined by a competitive "necessary return for storage." We may now say that the price of wheat for May delivery exceeds the price for December delivery by the amount of the *necessary return for storage* from December to May. Given a futures market, active informed competition occurs in determination of the necessary return, because any elevator operator who hedges the stocks he carries knows within rather narrow limits what return he will receive for the storage service rendered.

Near the end of November, for example, the hedger may make a choice whether to sell wheat which he has in store or to carry it until May. For purposes of the reasoning, it makes little difference whether the wheat at the time of decision is hedged in the December or in the May future; if the hedge is in the December future, decision to hold beyond December will require transfer of the hedge to the May future, at a cost, at most, of only 0.3 cent per bushel, and at a cost of only 0.15 cent per bushel if the hedger holds membership in the exchange, as large hedgers do for the sake of such savings. Suppose the hedge already in the May future. In making his decision, the hedger assumes as a first approximation that at the end of April the price of the wheat he owns will stand in the same position relative to the price of the May future as it holds at the end of November relative to the December future. If events should conform to that assumption, his return for storage would be exactly the amount by which the price of the May future exceeded the price of the December at the time the decision was made. If he thinks that the price of the wheat he owns will either appreciate or depreciate relative to the price of the specific quality of wheat represented by the futures contract, any such expected change must be applied as an adjustment to the known price difference between the two futures in order to arrive at his expected return for storage. Yet even in cases where there is opportunity for substantial change in relation between the price of the wheat owned and the price of "contract wheat"—opportunity which may exist either because of a large difference in quality or because of a large difference in location—it is common to make no adjustment for this possibility because the most reasonable assumption at the time is that no change in relation will occur. In any case, the known relation between prices of the two futures gives the hedger a basis for anticipating his return for storage which is far superior to any estimate which could be made in the absence of a good hedge in a futures market or of an outright forward sale of the actual wheat.

Thus existence of a futures market, coupled with the practice of

hedging, gives potential holders of wheat a precise or at least a good approximate index of the return to be expected from storing wheat. This is an important fact which has been too much neglected in discussion of the economics of futures trading. It is through supplying a direct measure of the return to be expected from storage, and a means, through hedging, of *assuring* receipt of that return, or of approximately that return, that a futures market makes its most direct and powerful contribution to the economical distribution of supplies of a commodity over time.

A known return for storage is, in essentials, a price of storage. The fact that the price of storage is not quoted directly, but must be derived by taking the difference between quoted prices of wheat for two different dates of delivery is immaterial for the economic reasoning. The price difference, at least when it is positive, is in all essential respects itself a price of storage, determined in a free market through the competition of those who seek to supply storage service. The general form of the storage supply curve is known from statistical studies and may be represented as in Figure 1.

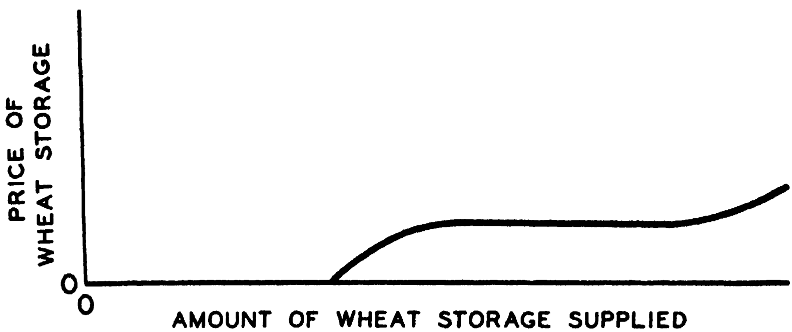

FIGURE 1. STORAGE SUPPLY CURVE

Because Figure 1 is a generalized representation, scale values are not shown except at the origins, which are taken as zero for both price and amount of storage. The price scale depends, among other things, on the length of time-interval involved; for example, the price figures will be larger for storage from September to May than for storage from December to May. The quantity scale depends, for one thing, on the time of year, for reasons that are somewhat complicated, but relate partly to opportunities to use the storage facilities for storing other grains. This observation suggests that the position and form of the curve itself may change somewhat from year to year with variation in those alternatives. The scale depends also on the measure used

for amount of storage; the indices of amounts which are available for statistical analysis are not quite the measures which would be chosen for theoretical discussion.

III. *The Theoretical Problem*

The foregoing theoretical treatment does not meet the problem posed at the outset because this theory considers only the case in which the price for later delivery is *above* the price for earlier delivery, affording a positive return for storage, or price of storage, whereas the problem tends to emerge clearly only when the price for deferred delivery is *below* the "nearer" price.

One approach to treatment of the latter class of circumstances is afforded by extending the theory to admit consideration of negative prices of storage. We may then draw the supply curve for storage as in Figure 2, which differs from Figure 1 only in that the curve of the

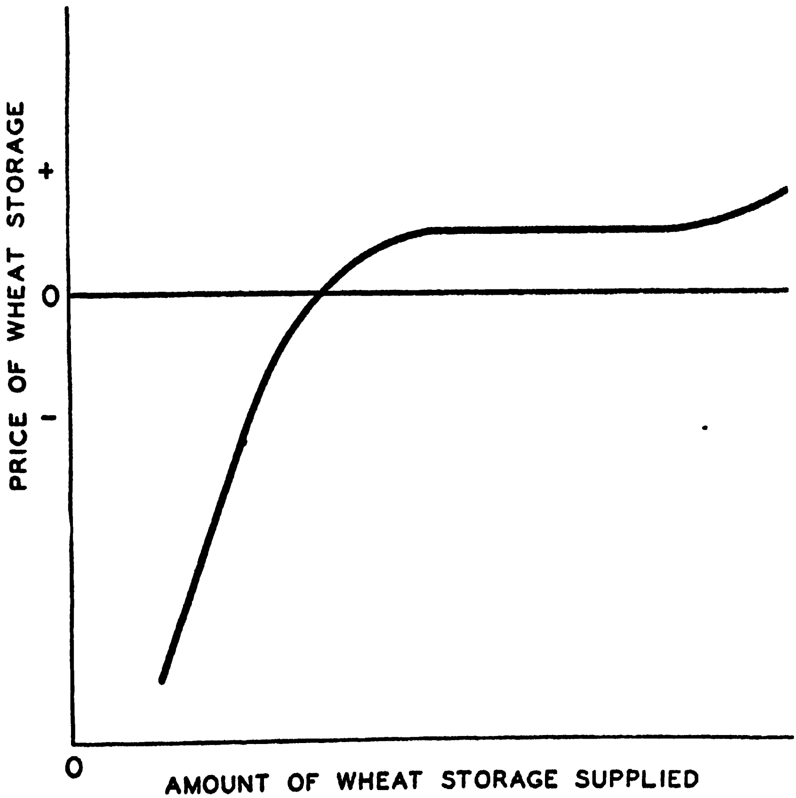

FIGURE 2. COMPLETE STORAGE SUPPLY CURVE

earlier diagram is extended downward and to the left, into an area of negative prices.

This diagram also is founded on statistical observation. When the difference between prices for near and for later delivery, which we have seen may profitably be regarded as a price of storage if it is positive, takes negative values, wheat is nevertheless stored in substantial quantities over the time-interval considered. The amount which is stored, however, tends to be less when the "price of storage" is negative and large, than when it is negative and small. There is strong evidence that the continuity of the curve is uninterrupted where it crosses the zero line.

Let us now consider a question which might have been raised with regard to Figure 1. Both Figure 1 and Figure 2 show, as is demonstrably the case, that a large amount of storage is supplied even when the price of storage is exactly zero. One condition which makes that possible is the fact that storage of grain is an enterprise in which most of the costs are fixed costs, from a short-run standpoint. Another important condition is that for most of the potential suppliers of storage, the costs are joint; the owners of large storage facilities are mostly engaged either in merchandising or in processing, and maintain storage facilities largely as a necessary adjunct to their merchandising or processing business. And not only are the facilities an adjunct; the exercise of the storing function itself is a necessary adjunct to the merchandising or processing business. Consequently, the direct costs of storing over some specified period as well as the indirect costs may be charged against the associated business which remains profitable, and so also may what appear as direct losses on the storage operation itself. For any such potential supplier of storage, stocks of a commodity below some fairly well recognized level carry what Kaldor has aptly called a *convenience yield*.[3] This convenience yield may offset what appears as a fairly large loss from exercise of the storage function itself.

Thus we have an explanation not only of why large quantities of wheat are stored in the absence of any direct return for storage, but also of why wheat is stored when the figure which we have chosen to call "price of storage" is negative. There remains, however, the question whether it is good theory to treat these negative values as negative prices. Should we, rather, say that the difference between prices of a commodity for two different dates of delivery may be considered a price of storage only when the indicated price is positive, and that some other theoretical treatment of the relation should be provided to cover the

[3] Nicholas Kaldor, "Speculation and Economic Stability," *Rev. Econ. Stud.* (1939-40), Vol. VII, p. 6.

area of negative values? Other possible treatments come to mind, but none which seems to me to have merits which warrant advancing it as preferable to recognition of the existence of negative prices of storage.

IV. *Supplementary Considerations*

If we leave open the question which has just been raised, there may be occasion to reconsider how well, in fact, the price-of-storage theory serves in the area of positive "prices of storage." Two limitations of the theory may be noted: (1) much storage is supplied by people who do not hedge and who decide to store, or not to store, without regard to what we have called the price of storage; and (2) much storage by those who do hedge earns a return which is not exactly equal to the market price of storage. Neither of these limitations has any importance from the standpoint of principle, however; each has its counterpart in familiar price theory. If people store without regard to the current market price of storage, so do people produce vegetables without regard to the current market price of vegetables. And if some people store because they expect to receive a higher return than the quoted market price of storage, so also do people produce goods in expectation of a higher return, owing to quality or to place of sale, than the price recorded in available quotations.

A particular merit of the price-of-storage theory is that it exposes clearly the fact that in the presence of hedging much storage does occur in response to a recorded, and competitively determined, assurance of return specifically for the storage itself. This creates a situation very different from that where storage is undertaken simply in the hope of price appreciation. As has been remarked, this establishment and recording of an exactly or approximately known return for storage is a principal means by which futures markets facilitate the economical distribution of supplies through time.

This merit of the price-of-storage theory is one which argues for extending the theory to cover negative prices. The negative prices occur when supplies are relatively scarce. They then impose pressure on hedging merchandisers and processors to avoid holding unnecessarily large quantities out of consumption in the form of stocks which they can do without.[4] Thus a negative price of storage makes available for consumption in a year of shortage, supplies which would otherwise remain tied up in "convenience stocks." In the case of wheat in the United States, the quantity which may be drawn out of pure con-

[4] A correspondent whose remarks have been much appreciated has advanced the objection that recognition of a negative price of storage implies that people are paid for *not storing*. To my mind, it implies that people are paid *in reverse* (that is, have to pay) for such storing as they choose to do.

venience stocks and made available for current consumption by a negative price of storage is of the order of 75 million bushels.

The main reason, of course, for adopting the cost-of-storage theory, or some alternative which provides *direct* explanation of inter-temporal price relations, is that some such explanation is necessary to account for observed price behavior. Only some direct explanation of the price relation in terms of an existing condition can account for the fact that expectations regarding future events, which are directly pertinent to a distant forward price, have approximately the same effect on spot and near forward prices as on a distant forward price.

COMMUNICATIONS

Federal Expenditure and Revenue Policy for Economic Stability

Editor's note—The following statement, together with a second statement *Fiscal Policy in the Near Future,* was transmitted to the Joint Committee on the Economic Report September 23, 1949. See: *Federal Expenditure and Revenue Policies,* Hearings before the Joint Committee on the Economic Report, September 23, 1949, 81st Cong., 1st sess., U. S. Government Printing Office, Washington, D.C. The reports were also printed in *Monetary, Credit, and Fiscal Policies,* a Joint Committee print of statements from various sources and in the *Congressional Record,* September 26, 1949, pp. A-6137-9. The statement is of such general interest to economists that it was thought desirable to reprint it in the *Review.*

The statement was drafted at a conference called by the National Planning Association at Princeton, N.J., September 16-18, 1949, at the request of the Subcommittee on Monetary, Credit and Fiscal Policies of the Joint Committee. It was adopted unanimously by those attending. The signers were: Howard R. Bowen, Howard S. Ellis, J. Kenneth Galbraith, James K. Hall, Albert G. Hart, Clarence Heer, E. A. Kincaid, Simeon E. Leland, Paul Samuelson, Lawrence H. Seltzer, Sumner H. Slichter, Arthur Smithies, Tipton R. Snavely, H. Christian Sonne, Jacob Viner, and Donald H. Wallace.

Introduction

Although our economic system accords a dominant rôle to private enterprise, government expenditures and receipts have now reached a scale that make them crucially important factors in our national welfare. In 1949, with a gross national production of 250 billion dollars, the federal government is spending more than 40 billions, while federal, state, and local governments together are spending around 60 billions.

Government programs of this size make it more than ever desirable that every dollar of government expenditures be used as efficiently as possible. We are not rich enough to afford waste of resources by government any more than by anyone else.

It is equally important that the expenditure and revenue programs of government, in their formulation and execution, be consistent with the progress and stability of the private economy. The fiscal policy of the government must make useful positive contributions to the maintenance of high levels of employment and income—the goals declared in the Employment Act of 1946 to be a national objective.

Government affects business through both sides of its budget. Payments to government employees, bond holders, veterans, the aged, and the needy all constitute income that can be used to buy consumption goods from business; government procurement affords a direct market for business. On the other side of the budget, taxes capture funds that consumers might have spent or that business firms might have invested in improved facilities. Taken by themselves, tax collections tend to shrink the market of private business, contract employment, and lower prices; just as, taken by themselves, government ex-

penditures tend to expand the market for business, increase employment, or raise prices.

It is not only the size of revenue and expenditure that counts; their composition must also be considered in any appraisal of the effects of government policy. The economic effects of a billion dollars collected in the form of income taxes will be different from those of a billion dollars collected in excise taxes. Spending to build roads may stimulate private investment in automobiles, trucks, and garages; there are other forms of expenditure that may have adverse effects on private investment. Rationally or irrationally, government spending and taxing may greatly affect the climate within which families and businesses make their decisions.

The Principle of an Annually Balanced Budget

The traditional goal of fiscal policy was to secure a balanced budget in every single year. But that objective has now proved impracticable and, besides, has serious disadvantages in principle. There is not even a clear or unique concept of "budget" to which the requirement of balance could be applied. For instance, in *the regular budget,* bookkeeping transfers to the social security trust account are classified as expenditures. As a result of this, that budget may show a deficit at a time when *the cash budget* shows an excess of receipts over outgo. But even the cash budget may not be adequate to portray the effects of fiscal policy; taxes may have their impact when tax liabilities are incurred rather than when payment is made; purchases may have their impact when contracts are entered into rather than when disbursements are made. However, where a single budget concept is used in economic analysis bearing on stabilization policy we prefer the cash budget to any available alternative.

Compared to the full span of the business cycle, a year is a short period of time. To insist upon a balance in every single year is certainly undesirable and to attain it is probably impossible. To attempt to raise tax rates every time there is a decrease in national income will only result in discouraging private consumption and investment at a time when these are most in need of expansion; on the other hand, to try to eliminate a tax surplus by cutting tax rates or expanding government activities would serve to increase inflationary pressures at a time when they are already acute.

If the budget were balanced in good years as well as bad, there would have to be either big fluctuations in expenditure programs or severe and perverse changes in tax rates. To vary expenditures in this manner would disrupt the essential services provided by government. Applied to military expenditures, it would mean a large defense program in boom years and a small defense program in depression years. This is both ineffective and wasteful. Government would be increasing its employment of resources when they were scarce and cutting down on their use when they were abundant. This, of course, would aggravate the fluctuations in private business.

The Problem of Controlling Government Expenditures

Annual budget balancing is, thus, both difficult in practice and unsound in principle. But one great merit it does have: it provides a yardstick by which

legislators and the people can scrutinize each activity of government, testing it both for efficiency of operation and for its worthwhileness in terms of cost. Every government program undertaken has to be paid for in a clear and unequivocal sense. The Legislature and the Executive are required to justify additional taxes equal to the cost of any new program. This is a principle every citizen can understand. If dropping the principle of annual budget-balancing were to mean dropping all restraints to unwise and inefficient expenditure, grave damage would be done to our economic and political system.

Were expenditures divorced entirely from the need for taxation, political opposition to extension of the government's expenditure programs would largely disappear. The scale on which the public sector absorbs resources would grow beyond what was really desired by the people as a whole; sooner or later the country would find itself in a state of chronic inflation. Such inflation is a sign of weak government and comes from eagerness to spend without a willingness to tax. Accordingly other general principles, other habits of thought and of action must be set forward to insure the standards of judgment and the self-discipline of government's activities and to do better what the principle of annual budget policy attempted—though imperfectly—to accomplish.

Experience shows that business activity has its ups and downs. There is thus a strong case for counter-cyclical fiscal action—surpluses in good times and deficits in bad. If we do not adopt such a policy deliberately we are likely to be forced into an imperfect version of it through the pressure of events. One of the major questions for the future is how such a policy can be administered with the restraint and efficiency that is supposed to be achieved through the balanced budget rule. If a flexible policy is to win acceptance, it must not be used as an excuse to introduce expenditure or tax programs that cannot be justified on their merits. Boondoggling should have no place in a rational fiscal program.

We doubt whether it would be possible, or even desirable, to rely exclusively on fiscal action to offset fluctuations in private business. That course could easily involve changes of impractical magnitudes in taxes and expenditures; it would mean placing excessive reliance on one measure for achieving economic stability and growth; it would involve problems in forecasting beyond the reach of present knowledge and techniques.

We can, however, reasonably expect that the budget be formulated in the light of economic judgment available that takes full account of the actual course of events and should contribute to economic stability rather than aggravate instability. In view of uncertainties, part of the planning process should be preparation for quick adaptation of fiscal operation to changing circumstances. Certain automatic devices for bringing remedial forces quickly into play are in a stage where they deserve consideration.

Guides to Fiscal Policy in Normal Times

When the economy is prosperous and stable and there is no clear-cut reason to expect a change in any particular direction, the objective of policy should be to adapt the budget to changes in the government's requirements but to leave its economic impact on total employment and purchasing power un-

changed. This could be approximately achieved if newly planned increases or decreases in expenditures were to be matched with corresponding changes in planned tax receipts. The net expansionary or contractionary effect of the budget would then remain roughly the same. Thus, in conditions of continued prosperity, a modified version of the balanced budget rule could be used as a guide: taxes should grow or shrink corresponding to desired changes in expenditures. Thus proposed increases in expenditures would be exposed to the traditional test of whether they are worth their cost in terms of taxes.

However, if recent events and the outlook for the near future pointed, on balance, toward unemployment and deflation in the private sector of the economy, then budgetary changes should be made in the direction of producing a moderately expansionary effect. New government expenditure programs should still be considered on their merits, but the additional taxation that in prosperous times would accompany them should now be deferred. Taxes that are deferred in these circumstances should be put into effect as soon as that can be done without impeding recovery. There should be no delay in making the tax reductions warranted by any reductions in government expenditures; and if expenditure requirements are expected to decline in the future, anticipatory tax reductions could be enacted.

On the other hand, if the weight of the evidence appeared to be on the inflationary side, the opposite policy should be followed. The rule that increased expenditures should be accompanied by increased tax yields should be rigidly followed. Tax reductions that would normally be in order should be deferred; and tax increases should anticipate expected increases in expenditures.

Guiding Principles in Time of Acute Recession or Boom

Where there is a definite expectation, justified by events, of serious recession or inflation, more strenuous fiscal measures would be called for, and the policies described above should be supplemented by emergency fiscal action.

In the event of severe recession, it is not only politically necessary, but economically desirable to provide additional employment projects that can be started and ended quickly. Temporary tax relief should be given in order to stimulate private spending and employment. Other incentives for private investment, such as guarantees, should be considered. There can be no social or economic justification for allowing mass unemployment to persist for extended periods at a time when there is abundant need for roads, schools, hospitals, and other useful objects of public expenditures. However, we recognize that there are difficult questions of extent and timing connected with any such program. An over-ambitious government program may impede the course of recovery in the private sectors of the economy by dislocating resources and delaying needed price adjustments. On the other hand, a program that was over-cautious could needlessly fail to advance recovery by not stimulating the demand for the products of private industry. Much skill and judgment are required to move from depression to stable prosperity. We must not rely on the private economy, unaided by government action, to perform that task. The government must not shirk the responsibility placed on it by the Employment Act, and fiscal policy is one of the most promising instruments it possesses.

On any occasion when serious inflation is in prospect, emergency measures would be needed to curtail expenditures and increase taxation. Wartime and postwar experience provides convincing evidence that the political obstacles to a fiscal policy adequate to combat inflation are so great that there is little practical danger of going too far. The survival of a relatively free and stable price system depends heavily on our willingness to fight inflation by fiscal methods.

A policy that helps to maintain stable prosperity will be no more likely in practice to result in an upward trend in the national debt than one that does not. The course of events may in fact be such that stabilization requires steady reduction in the debt. Budgeting surpluses to fight inflation will provide for the reduction of the public debt in a helpful rather than a painful fashion. Surpluses are not feasible in times of depression. They are desirable where the private economy is strong enough for the government to tax more than it spends without causing unemployment. The private economy is not likely to possess this strength if government policies aggravate rather than offset business fluctuations.

Additional Possibilities for a Flexible Fiscal Policy

While we consider these guides for budget policy essential to a stabilization program, the annual budget cannot, in the nature of things, be based on precise forecasts; nor can it be expected to compensate for sudden and short-run fluctuations in business that occur within the period of its operation. Even though the budget can and should be amended in the light of changing circumstances, the legislative process is necessarily too cumbersome to make delicately timed adjustments in fiscal policy. Therefore, we consider whether further flexibility can be achieved by two devices which may be called *"automatic flexibility"* and *"formula flexibility."*

"Automatic flexibility" means a tax system such that revenue under a given set of tax rates will fall sharply if unemployment develops, and rise sharply in the opposite case of inflation; and expenditure programs under which increased outlays arise from increased unemployment.

"Formula flexibility" means a system under which pre-announced tax cuts and upward revisions of spending programs will come into force if unemployment exceeds a certain figure or production falls below a certain level, and pre-announced changes in the opposite direction if price indexes rise at more than a certain speed.

Automatic Flexibility

Automatic flexibility is exemplified by the unemployment compensation system. If unemployment increases, employers' contributions at once decline, while the unemployed begin almost immediately to draw more in benefits. Thus the government finds itself automatically taking less money out of the public's pockets and putting more in.

There are now many such flexible elements in federal taxes and revenues; and they have greatly increased in importance with the growth of the budget. Besides the unemployment compensation system, there is, for example, substantial automatic flexibility in personal and corporate income taxes.

Automatic flexibility can slow down and perhaps halt a decline of activity or a rise of prices; it can give time for restorative forces to come into play, but it will not, by itself, pull activity back to a full-employment level or restore prices to a pre-inflation level.

We feel strongly that the existing automatic flexibility makes an important contribution to economic stability, which should not be frittered away, as it would be, for instance, by rigid application of the annual-balanced-budget rule. But we do not believe it prudent for policy to regard automatic flexibility as more than a first line of defense; more must be done to cope with serious economic fluctuations.

Formula Flexibility

The enactment by Congress of rules under which tax rates, and perhaps of rules under which expenditure programs, will shift in certain contingencies specified in advance is a possibility that deserves further exploration. For example, the period during which unemployed workers can draw unemployment compensation might be extended according to a flexible schedule based on the volume of unemployment. The withholding rate under the personal income tax for any calendar quarter might rise by a stated amount above a standard rate whenever, say, the index of retail prices has increased by over a certain amount in the preceding six months. The withholding rate might be lowered whenever standard indices of production and employment drop below stated levels or trends.

The question of formula flexibility shades off into the question of granting to the Executive wider discretionary authority than it now possesses to initiate changes in the timing or extent of the fiscal program. This raises difficult issues of political principle and administrative responsibility. We can here do no more than call attention to them.

Conclusion

In this statement, we have confined ourselves to fiscal policy of the federal government. But, while essential, that is only one element in a stabilization policy. The policies of state and local governments can make useful contributions within their more limited spheres. Monetary and credit policies including debt management must play an active role in their own right and must be properly coordinated with fiscal policy. All necessary measures must be taken to preserve and stimulate competition. Supported by such measures, federal fiscal policy offers the best prospect of achieving sustained prosperity within the framework of our existing economic system.

The Havana Charter: Comment

In a recent article in this *Review*,[1] Sir Hubert Henderson advances the most serious objection so far registered against the International Trade Organization Charter. Unlike most critics, he attacks neither its idealism nor its con-

[1] Sir Hubert Henderson, "The Havana Charter," *Am. Econ. Rev.*, Vol. XXXIX, No. 3 (June, 1949), pp. 605-17.

cessions to realism, but holds that its basic principles are fundamentally unsuited to the conditions and problems of the modern world. Because this criticism strikes at the Charter's very roots, and also because it raises issues which are vital to the whole current approach to international cooperation, it merits careful attention.

As Sir Hubert points out, the basic principles of the ITO have never been called in question, at least by its chief sponsors. Certain desirable aims, which the Charter seeks to realise, have been taken for granted. These are: (a) a large and expanding volume of international trade, to permit the fullest possible realisation of the advantages of international specialisation; (b) as a necessary condition thereof, the "utmost practicable scope" for multilateral payments; (c) "commercial policies which satisfy the desire for equity and fair-dealing between nations" (p. 607).

From these aims, it has seemed only a short step to the principles of the Charter as a means to their realisation. The principles of the Charter Sir Hubert summarises as follows: (1) Non-discrimination; (2) Reduction of tariffs on the basis of reciprocal concessions; (3) Outlawry of import restrictions (subject to many reservations); (4) Free convertibility of currencies (relating, strictly speaking, to the Fund rather than to the ITO).

These principles seem to flow logically from the aims almost everyone accepts as desirable. But, Sir Hubert interposes, the list of principles is misleading because it is incomplete—it omits equilibrium in the balance of payments. This is a "requirement of paramount importance," and it cannot be adequately met by the numerous exceptions and escape clauses of the Charter. It is the "central problem of modern international economics," and any plans for international organisation which take it for granted or fail to approach it constructively are doomed to failure.

Turning to the specific principles of the Charter, Sir Hubert has no difficulty in showing that with respect to non-discrimination, the attitude of the United States is inconsistent. We want western Europe to reduce its dependence on us, in part by supplying itself with more from its own resources. But we are unwilling, because of our insistence on the principle of nondiscrimination, to sanction preferential treatment unless it goes all the way to a customs union. Discrimination, we hold, should be permitted only for exceptional occasions, when balance of payments difficulties are serious. The normal practice should be non-discrimination.

Sir Hubert contends, however, that the distinction between "exceptional" and "normal" is unreal. "The restoration of basic equilibrium in the international balance of payments is no mere passing problem of the transition from war to peace. It is a long-term, large-scale task" (p. 608). Also, he argues with much force, a customs union for western Europe is impracticable. In the short run, control of the balance of payments is essential to each country to enable it to safeguard its international position. In the longer run, a customs union is probably over-ambitious, and therefore likely to lead to make-believe and frustration.

In its approach to tariffs, Sir Hubert feels, the ITO is passive rather than constructive, since it contributes nothing toward the solution of the para-

mount problem of balance of payments equilibrium. For it requires *reciprocal* concessions, and this means that concessions which increase America's imports must be balanced by concessions which increase America's exports by a similar amount. "This, in turn, comes very near to making it a *sine qua non* of tariff reductions that they should do nothing to solve the dollar problem or to readjust the balance of payments of the world" (p. 612). In the world as it is, the general principle should be that countries should reduce tariffs in proportion to the strength of their balance of payments position.

Sir Hubert takes a dim view of the prospects of resolving international maladjustments through the price mechanism. Reliance upon the forces of the price system are all very well when adjustments are small or marginal, but not when they are large. For the latter, "it is necessary to supplement and sometimes to supersede these forces by more direct measures, consciously directed to the object which has to be attained" (p. 613). He concludes, therefore, that the orthodox solution of large maladjustments by altering exchange rates, and proceeding from this to the reduction of tariffs and the elimination of quantitative restrictions, is misleading. Exchange depreciation is no "sovereign remedy for a balance of payments deficit." Even establishment of the correct exchange rate[2] tends to raise prices, costs, and incomes, and to set in motion a spiral of inflation and devaluation.[3]

A more fundamental consideration than the practical dangers of devaluation, however, lies in the large-scale character of the change which must be undergone by a country in straitened international circumstances. Such a country must readjust the whole structure of its economic life, in particular its habits of consumption and production. To effect a "radical change in the composition of a country's imports" requires resort to direct controls; reliance cannot be placed upon the price-making forces. "Any necessary reduction of imports will be less injurious to its standard of life, if it is *selective*, falling heavily on some items and sparing others, than if it is indiscriminate" (p. 615).

This, considerably truncated, but I hope not seriously distorted, is Sir Hubert's case. His analysis is most ably reasoned and attractively garbed. I am convinced, however, that it is fundamentally wrong, and, in Sir Hubert's own terms, misleading. Successfully to challenge his position in the sense of really joining the issue, he must be met on his own ground. Therefore it must be admitted that the problem of balance of payments equilibrium is of "paramount importance." This is certainly consistent with generally received opinion. It may be taken as an axiom that an expanding volume of international trade cannot be achieved in a world bound by exchange controls, quantitative restrictions, and the resultant bilateral trading arrangements, but that it requires as a necessary condition a fully multilateral system of payments. The latter, however, cannot be restored until the acute balance of payments disequilibrium is solved. It must also be taken for granted that,

[2] Sir Hubert calls it "the right degree of 'under-valuation.'" It would be better to say, "the equilibrium rate."

[3] Sir Hubert admits that devaluation may be essential after internal inflation has caused a currency to become overvalued.

in line with the purposes of the European Recovery Program, western Europe will do its utmost to become self-supporting by 1952. We may reasonably assume, however, that ERP will fail by a substantial margin to eliminate the deficit in Europe's international accounts. On the basis of this area of agreement, let us examine the implications of Sir Hubert's position.

Sir Hubert urges us to choose a particular method of organising the economic relations of nations with a view to solving their urgent balance of payments problem. In essence, his choice reduces to this: to continue, for a long period of time—and hence probably indefinitely—a system in which reliance is placed, not upon adjustments via price changes, but upon conscious regulation of the balance of payments through tariffs and quantitative restrictions.

The alternative choice is the approach adopted by the United Nations and the new international agencies associated with it—the International Monetary Fund, the International Bank, and the proposed International Trade Organization. This is to remove, within a really short period (by 1952-53), existing quantitative restrictions and exchange controls, and to adjust any remaining balance of payments disequilibrium through the establishment of exchange rates appropriate to the new conditions. Thereafter it is proposed to allow international specialisation on the basis of comparative costs to determine the movement of goods and services. As remedies for temporary disequilibria, there will be available the resources of the IMF and the use of exchange controls and quantitative restrictions according to agreed rules. To correct more lasting disequilibria, devaluation may be used if appropriate; if not, a nation's productive structure may be altered through the development of new or the diversion of existing resources. To facilitate such structural change, international financial and technical assistance will be available through the International Bank and President Truman's "Point Four." There are also the exceptions in the ITO Charter which permit the use of tariffs and quotas to foster economic development.

Sir Hubert's choice means the continuance of bilateral trading arrangements and trade controls, and *no* return to a multilateral system of payments. It can mean nothing else. But this is precisely what the experience of the 1930's and of the postwar years teaches us we should avoid. Granted that the balance of payments problem must be solved *before* a multilateral payments system becomes possible, Sir Hubert's method would solve it in a fashion which makes any such system out of the question.

We may also grant that in view of the varying degrees of inflation and of economic disruption that have plagued the different European economies, reliance upon price adjustments in an open international system *at present exchange rates* would not work. This does not mean, however, that a *major* price adjustment such as is entailed in devaluation would not correct the situation. The phenomenon which has exerted perhaps the most disorganising effect on European trade has been inflation. This now appears to be coming to an end. Trade is also returning more and more to the prewar pattern, reflecting enduring bases of international specialisation with their roots deep in the past. In these conditions, a revaluation of currencies would be appropriate (and indeed has now taken place).

But what about the danger of setting off a spiral of inflation and devaluation? Devaluation will certainly tend to raise the price of imports. If social and political conditions make wage increases unavoidable, then the spiral will appear. It can only end, as it has on numerous occasions in the past, in currency collapse and the introduction of a new currency whose international value reflects the country's international competitive status. Social and political aspirations cannot fly in the face of hard economic facts. If the productivity of a country's labor is low, the attempt to charge other nations a price which is out of line with that productivity (as by the maintenance of an overvalued exchange rate) will present that country with a chronic balance of payments deficit. For no nation can continuously buy abroad more than it sells, and it can sell a large volume of goods and services only if it prices them attractively.

Unpalatable as it is to say so, the hardships that go with devaluation and acceptance therewith of a reduced standard of living cannot be avoided. The "solution" of the balance of payments problem by arbitrary control implies just as much austerity as goes with devaluation, and probably more. For—unless the elasticity of foreign and home demands is almost unbelievably unfavorable—devaluation means some increase in the foreign value and therefore in the volume of both exports and imports. There will be more to go round. Continued overvaluation supported by exchange control and quantitative restrictions, on the other hand, means restricting imports to the low level permitted by overpriced resources. Any gain, therefore, that might be realised by a selective (and discriminatory) reduction of imports is likely to be more than offset by a decline in the overall volume of imports—not to mention the further offset involved in the resources devoted to the maintenance of an extensive system of foreign trade controls.

If this argument is sound, it means that the basic aims of the ITO and the IMF are correct—*including* balance of payments adjustment (when appropriate) via devaluation. They seek to restore an open trading system based on free multilateral payments, which will make possible rising standards of living founded on the fullest practicable realisation of the advantages of international specialisation. Even Sir Hubert agrees that these aims are desirable. He objects, however, to devaluation as a means of restoring equilibrium and thus making attainable a multilateral system of payments. But this is probably the key to free multilateral payments, which in turn is the key to free and expanding trade. Sir Hubert, however, chooses to throw away the key and leave the door locked.

Two special aspects of Sir Hubert's argument require further comment. These have to do with the adoption, in the Havana Charter, of the principle of reciprocal concessions in tariff negotiations, and the principle of permitting tariff preferences only as interim arrangements preliminary to the formation of a customs union (or free-trade area). I have long felt that these principles were mistaken. The United States could contribute much to the solution of today's and tomorrow's balance of payments problems if it undertook a unilateral reduction of its tariff. Naturally, this would require measures to soften the shock of adjustment and to facilitate adaptation to the changed

conditions. But to insist on a *quid pro quo* for every concession in duties, and to confine our concessions to reductions which *must be* relatively innocuous—as is implied in the escape clause providing for their withdrawal in case of serious damage to vested interests—accords ill with our present and foreseeable international position.

As to preferences, the only objection to their continuation that to me makes sense is that they generally lead to an increase in barriers to trade with outsiders. If preferences were permitted, subject to the proviso of the Charter that the approach must be via duty reductions to insiders rather than increases to outsiders, but without the requirement that any new preferential arrangement must be as a step toward complete customs union, it would seem that the rules of international good conduct were not being infringed. Like Sir Hubert, I can make nothing whatever of the logic which permits complete but not partial preference between two or more countries.

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Truth and Relevance at Bay

Since, to our sorrow, Frank Graham is no longer on hand to defend himself (otherwise he would need no help from this writer or anyone else), another may be allowed to take note of some features of Professor Lincoln Gordon's reply to his review of Barbara Ward's *The West at Bay* ("Libertarianism at Bay," this *Review* for September, 1949). I wish to speak of issues, not of personalities. No one need begrudge Mr. Gordon his little exercise in self-expression, at least no one about to indulge in the same sport. Since he has introduced the "issue" of manners, I may express agreement that it *does* seem like "egregious rudeness" on the part of the "libertarians" to keep telling literate adults that two and two are four and effects (usually) follow causes, and worse, it is not always done with the tender patience appropriate to kindergarten teaching. The *tu quoque* is usually true, if rarely polite or effective; and it *might* be replied that when one of Mr. Gordon's professional status in another "science" uses the pages of a professional economic journal to read a Sunday-school lecture to one of Frank Graham's age and achievements, ending by diagnosing the author, *inter alia,* of *Social Goals and Economic Institutions,* as not knowing down from up, "one" (at least) "can hardly escape" being reminded of a venerable philosophic principle, that 'you have to draw a line somewhere.' Perhaps I may venture to ask Mr. Gordon, quite humbly, for instruction on the etiquette of discussing policies with opponents whose whole argument explicitly rests on the assumption that arithmetic and predictable consequences do not matter if the heart is right and one is tolerably well read in history. However, it is weightier matters that I really wish to notice.

Mr. Gordon starts off by still insisting that the Ward volume is "on balance a good book," in opposition to Graham's characterization as "subtly dangerous and subversive." I shall not argue that it is not a "good book." There are many ways in which a book may be good, and several of these goodnesses are entirely consistent with being dangerous, and subversive of the values on which

a free society must be founded. Indeed, it is much easier to achieve literary charm if one does not bother too much about mere truth and relevance. Poetry and fiction are usually more pleasant reading than information and analysis. A fine novel, or lyric poem, or epic, may be written about a plague, asserting everything false about the nature of the disease, its causality, and effective treatment. And "these days," it is in no way surprising, to an economist, that a professor of a sister social "science" finds it "breath-taking" when Graham states the truism that a shortage arises from price-fixing. Rather, it is a phenomenon discouragingly familiar. The professor is merely echoing the man-in-the-street, and the mine-run of politicians, publicists and commentators. Such "thinking" is the despair of the teacher of elementary economics. If educated people can't or won't see that fixing a price below the market level inevitably creates a "shortage" (and one above it a "surplus") it is hard to believe in the usefulness of telling them anything whatever, in this field of discourse. (And "of course," in an open market there can be neither a shortage nor a surplus "at the price," while "absolutely," relative to need, there is *always* a shortage, of anything that is of economic concern—though sellers will find a surplus!) One asks what is the chance of securing consideration of the economic problems that really are problems. (The reference is only to Britain's "dollar-shortage," not to the complex of its economic difficulties; but in fact, most of the country's "terrible situation," of which we hear so much, is the result of inept governmental "planning," interfering with economic liberty, or of failure to take positive action where needful to preserve freedom.)

Most interesting of all is the "line" taken in Mr. Gordon's final paragraph. Such toplofty preaching of platitudinous profundities about the deeper-historical-forces and the higher-spiritual-values has exactly as much relevance to ordinary concrete economic issues as it would have to an outbreak of typhoid spread from an infected water supply. This sort of business from serious writers is meat and drink for the demagogue; and the most dangerous and subversive demagogues are the "honest" ones, those of pious intentions. Unfortunately (human nature being what it is) a free society requires intelligence, in the prosaic, "dismal-science" sense of literal objectivity and pertinence. Problems of means and ends are not solved by romancing about them, or moralizing, in whatever pretty or edifying phrases. Better let them alone, since bad policies are worse than none. It is a sad truth that one main enemy of sound economic action is precisely the deeper historical forces and higher spiritual values—as expounded by such journalists as Miss Ward and such social scientists as Mr. Gordon—together with the bulk of our sociologists, historians, etc., and "of course" the preachers and moralists and the literary intelligentsia. In short, practically everybody, except a few hold-over economists from the age that believed—if somewhat naïvely—in truth and freedom. A thinning rank, whose views no doubt are, as Mr. Gordon amiably says, "of little moment so long as everyone recognizes that the whole world is out of step except the libertarians"—and, with him and Miss Ward, elects to swim with the current. *That* is the meaning of "down," in relation to swimming, and Frank Graham did not need Mr. Gordon's tutoring

on the point; he merely chose to swim *against* the current. Foolishly? Perhaps. But he could not see either freedom or prosperity in passing laws and appointing policemen to keep people from acting in accord with their mutual and common interests—dismissing opponents by saying that *they* believe in original sin.

Apparently it *is* the direction of the current, for the visible future. As has often been observed, "progress" occurs in waves, recession alternating with advance; and economic thinking and policy are in a phase of deep recession at this time. After an epoch of venturing and achieving, we see a mania for security, and insistence on the right to consume regardless of production, in a world which just isn't built that way. Until this phase passes, one who points out that any well-intentioned but palpably stupid policy will have results opposed to those foreseen or desired may expect to be classed as opposed to all remedial action. And this regardless, also, of all endeavor to find and point out remedies effective within the possibilities and not clearly worse than the disease. Truth, even simple arithmetic, and relevance, will seem immaterial. But, it was so for ages with respect to magic and witchcraft in medicine and dealings with the physical world. (One may doubt whether today, in any country, the total of what is done to "heal" actually does more good than harm.)

Let me repeat that I am not concerned with personalities; but the issue between Ward-Gordon and Graham is large and serious, and hard to discuss. I must speak plainly. What can a serious economist do but "fight back" when outsiders in high places use their persuasive talents to tell the world that in explicit discussion of economic policy it is unimportant how bad is the economic reasoning or recommendations, if only an author shows "an understanding of the moral foundations of western civilization"? Gordon does not specify; that might suggest issues! I must mention the fact that much of what passes current, even as "sacred" in this connection is a survival from the Dark Age in Europe; an age of despair, when men's fundamental beliefs and morality were escapist, supernaturalist, millenarian, ascetic or supinely submissive, and obscurantist; when in particular the "right" use of wealth was to give it to the nearest pauper (to be dissipated) or, better, to some ecclesiastical outfit pretending to represent the pauper interest and ideal. Our civilization is based on antithetical values of freedom and progress through intelligence, with as much justice and humanitarianism as a complex organization of mere human beings can bear—and at worst far more than were practiced in the monastic age. Only if we are to return (in pretense) to an ethic of mystical or sentimental absolutes ("poverty, hunger and dirt") in which no modern mind can really believe, do we have a choice between our "moral foundations" and the arithmetic of intelligent cooperation, as embodied in the principle of comparative advantage.

Broadening the subject slightly, Gordon's commendation of *The West at Bay* as a good book is of a piece with the current "furor" for making "Great Books" the heart of liberal education. Like other simple formulas, this is not without merit, but raises rather than solves problems, notably where man and human relations and the social order are educational subject matter. If

our society is to be "free" in the minimal sense of not drifting rapidly into a brutal authoritarianism, it will be imperative for educators in this area to distinguish sharply between different and often conflicting species of excellence in literary composition. One sees no clear recognition of this fact, particularly in the propaganda centered on the Great-Books slogan. Mr. Gordon hardly refers to literary quality—quite as important as edifying morals and which, also sharing the emphasis on antiquity, conflicts widely and directly with "truth and relevance." Much effort, subtly directed, is needful to give the young (or the "adult") necessary historical background and a sense of culture continuity, without teaching *too* much that, however true or medicinal it may once have been, is now *too* false and pernicious for action, though it appeals strongly to our primitive emotions, including those we call our higher values.

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Inflationary Effects of a Balanced Budget Under Full Employment

It has been shown by Haavelmo,[1] in an article entitled, "Multiplier Effects of a Balanced Budget," that an increase in government expenditures, financed by an equal increase in taxation, will increase the level of the gross national product by the same amount. It was shown furthermore, by Haberler[2] and others, that, if the tax is levied before the making of the additional expenditure, the effect on income, in the long run, will be the same. In the case where expenditures increase before taxes, the final level of income is reached almost immediately: in the case where taxes are raised first, and expenditures afterward, the final level of income is approached asymtotically over a period of time.

The purpose of this note is to show that under conditions of full employment the multiplier, which in Haavelmo's terminology is equal to one, will be substantially greater than one. But first we shall summarize his argument.

The formula for disposable income to the private sector of the economy is given by:

$$Y = W + D + I + R + TP + S_b - T_d,$$

where Y is disposable income including corporate savings; W is wage payments; D is dividends; I is interest payments to individuals; R is rent; TP is transfer payments; S_b is corporate savings; and T_d is direct taxes.

Assume that the consumption function is linear and identical for all individuals, so that there will be no effects from the redistribution of income that may result from the imposition of taxes and their expenditure. There will be no shift in the consumption function. If the government increases expenditures, thereby increasing the public's income, and immediately takes

[1] Trygve Haavelmo, "Multiplier Effects of a Balanced Budget," Econometrica, Vol. 13, 1945, pp. 311-18.

[2] Gottfried Haberler, "Multiplier Effects of a Balanced Budget, Some Monetary Implications of Mr. Haavelmo's Paper," Econometrica, Vol. 14, 1946, pp. 148-51.

away the additional income through taxes, the level of disposable income will remain unchanged. But gross national product will have increased by the amount of the increased expenditure.

The formula for the gross national product is as follows:

$$GNP = C + B + G + F,$$

where C is consumption expenditures; B is business expenditure on capital account; G is government expenditure; and F is net foreign investment. Since disposable income is unchanged, there is no reason for C, B, or F to have altered. The component G has increased, and the level of economic activity, measured by GNP, has increased correspondingly. The total demand for goods and services has risen. But for the multiplier to be one, we must make an additional explicit assumption. We must assume that there are unemployed resources of all kinds, and that, as income increases, there is no rise in the prices of important goods and services. There is no rise in the cost of living for the typical consumer. Once the level of full employment has been reached, any further increase in the level of government expenditure will lead to a bidding up of prices and a diversion of resource to the government through forced saving.

It is here that the multiplier becomes greater than one. Disposable income in money terms has remained unchanged, but *real* income has fallen. It is true, in general, that people do not reduce their consumption by the amount of the decline in their real income, that is, the marginal propensity to consume in real terms is less than unity. In other words, consumers resist the attempt of the government to divert resources away from consumption to government use. The rise in price level and GNP needed to obtain, say, a ten per cent reduction of real consumption must therefore be greater than ten per cent. Total income generating expenditures by the government and the private sectors of the economy combined will rise in money terms by more than the increase in spending by the government.

It is, moreover, a virtual certainty that the marginal propensity to consume in real terms is very small over short periods. When it is less than the average propensity, the average propensity must rise as real income falls. This takes place whenever the consumption function intersects the Y-axis and is not concave upwards.

Assuming that the real marginal propensity is normally less than the average propensity to consume, we find that *in money terms* each rise in the price level causes an upward shift in the consumption function. The proportion of disposable money income consumed increases for any given level of income. Each reduction in real income means a sliding backward along a consumption function measured in real terms; in money terms it means an upward shift of the function. Every rise in the price level, given the level of money income, results in an increase in dollar outlays for consumption.

Through the initial rise in consumption expenditures the amount of income generated and the price level will rise further. Each successive rise in the price level will cause a further upward shift of the propensity to consume,

which in its turn leads to more income-generating expenditures. The smaller is the marginal propensity to consume in real terms, the greater is the price rise necessary to restore equilibrium. An attempt by the government to maintain the higher level of expenditures in real terms, by carrying through projects no matter what the money cost, and by raising the pay of its employees in pace with the rising price level, will, of course aggravate the rise in prices and money incomes. If the credit system is sufficiently elastic, an inflationary spiral may result. Each successive reduction in real income is counteracted by additional income-generating expenditures which defeat the attempt to take away goods and services from consumers. This is true even though tax collections increase *pari passu* with expeditures—the rates could even be reduced, because of the progressive elements in the tax structure.

In order to increase the level of government activity while avoiding the inflationary effects that would result, it is necessary to increase tax receipts by more than twice the increase of expenditures. Let us trace step by step why this is true: An increased outlay by the government with a balanced budget requires an addition to tax receipts by the same amount. But this would leave disposable income unchanged, and, as shown above, we would get an increase in consumption expenditures because real income has fallen. In order to avoid inflation we must reduce consumption expenditures by as much as government expenditures increase. To do this, it is necessary to raise taxes by at least as much again as government expenditures.

In addition, we have seen that the marginal propensity to consume in real terms is less than one and is virtually certain to be less than the average propensity. This means that consumption outlays in money terms will never fall by as much as disposable income. We must, therefore, take away more income than the desired reduction in consumption spending, and this means increasing taxes by more than twice as much as the planned increase in government expenditures. In other words, we must increase the fiscal surplus (or reduce the deficit) by more than the increased expenditures. It is only in this way that an expansion of government activity can occur under full-employment conditions without causing an inflation of prices and incomes.

In the light of this analysis, it might be concluded that the federal budget proposed for the fiscal year 1949-50 would have inflationary tendencies, providing that we are still at the full-employment level.

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Federal Reserve Policy and Federal Debt: a Comment

Mr. Chandler's analysis of Federal Reserve policy and federal debt in this *Review*[1] rues the fact that the Federal Reserve, by its policy of supporting government securities in the open market, has deprived itself of its traditional

[1] *Cf.* Chandler, L. V., Federal Reserve Policy and Federal Debt, *Am. Econ. Rev.*, Vol. XXXIX, No. 2 (Mar., 1949), pp. 405-29.

control over the supply of money. He argues that the highly elastic money supply resulting from this policy is not simply inflationary, but, in addition, "cannot fail to be an unstabilizing factor in an economy in which expectations concerning the marginal efficiency of capital fluctuate widely relative to the propensity to save."

The purpose of my remarks is not to differ with Mr. Chandler over the elasticity given to the supply of money by the commitment to support government bonds. Rather, I would suggest that the support policy is a necessary evil—to the extent that it is an evil—and that the difficulties it aggravates may be better handled through nonmonetary measures.

First, as to the justification of the support policy. Mr. Chandler is not convinced by the argument that pegging is necessary to protect holders of government securities against capital losses. He believes that these holders may not necessarily deserve such protection. Whether or not there is any moral basis for this protection, the fact remains that all financial institutions and many individuals maintain a very considerable proportion of their portfolios in the form of marketable government securities.

These governments were purchased to be used as a liquid secondary reserve (during the war period and up to the middle of 1947, even longer-term bonds were used for this purpose) and as the safest investment available. Regardless of any moral obligations to keep these securities at par or above, one cannot but wonder what the result would be if all investors showed a substantial book loss on their safest and most liquid asset. Indeed, with the widespread ownership and important rôle of governments in investment portfolios, the panic might well be far greater than it was after World War I, and could not help but have broad repercussions extending beyond the particular investors involved.

Furthermore, since sale of these securities would transform a book loss into a real loss, the liquidity of these investors and institutions would be seriously impaired. The effective liquidity of government securities would vanish. This does not raise an academic issue. The assurance of shiftability which government securities provide to a large portion of banking assets is a protection of prime importance for the ordinary borrower or privately marketed security. In the past, monetary stringency was always associated with a debilitating squeeze on private borrowers, a factor which greatly intensified the crisis and helped to push us into a cumulative downward movement. Under present circumstances, the first reaction in the event of stringency would be to unload governments on the Federal Reserve, and private borrowers would not have undue pressure brought upon them.

Mr. Chandler argues that investors could be protected anyway if the Treasury refunded outstanding issues at higher coupon rates; the new bonds would be quoted at par in line with the tighter monetary conditions which the Federal Reserve would promote. Does Mr. Chandler really mean to say that nearly $160 billion of marketable government debt could be refunded in one fell swoop with higher coupons without throwing the entire securities market into complete chaos? And how does the Treasury choose the correct moment for this unprecedented operation, as a practical matter? Finally, even if the

operation could be proven practical, the Treasury cannot legally call outstanding bonds until their call dates, which go out to 1967 on the longest term bonds; and a process of market repurchase by the Treasury would raise bond prices far beyond anything Mr. Chandler has criticized.

Mr. Chandler mentions that the proponents of the support program believe that a break below par in marketable bond prices might induce wholesale redemptions of savings bonds, in effect a demand obligation of the Treasury. However, he only mentions this argument, and makes no effort to break it down in the course of his article. Yet this danger is a very real one. The average individual who holds savings bonds would not understand that a 3 per cent yield on the marketable 2½s of 1967-72, for example, would still leave the 2.9 per cent yield on his ten year Series E Bond in a favored position. He would only see that governments were selling at less than 100, would fear that the credit of the government and the financial soundness of his bank were impugned, and would rush to the bank to cash his savings bonds and perhaps his bank accounts as well. A refunding problem of first magnitude in an unfriendly market would be forced upon the Treasury; substantial Federal Reserve support would doubtless be necessary, and the result could be far more inflationary than anything Mr. Chandler has seen so far.

He goes on to argue, however, that, even though the effects of a drop in government bond prices might not be wholly salutory, the disadvantages would be greatly outweighed by the anti-inflationary effects of a tighter money supply and higher interest rates. In his opinion, some restriction of private investment was neecssary after the war, in view of the high propensity to consume and heavy government expenditures. Granting his premise that such restriction would have been desirable, one must nevertheless question the efficacy of the blunt, broadside effect of credit restriction in achieving the objective with a minimum of disturbance. This problem could have been solved, if necessary, with greater efficiency by the retention of non-monetary wartime controls over the allocation and distribution of materials, so that high priority, essential projects could have been carried out, with the race tracks and swanky apartment houses postponed for a later date. Credit restriction is anti-inflationary, of course, but its use on a substantial scale after the war would have been completely non-selective and would not necessarily have curtailed private investment in the most desirable manner.

Mr. Chandler concedes that some support by the Federal Reserve may be essential and even desirable. However, he believes that the objective of the central bank should be "orderly adjustments of security prices and yields . . . in order to establish higher yields but still prevent 'disorderly' movements." This is far easier said than done, as the actual events themselves can prove.

The heaviest periods of Federal Reserve support were from November 1947 to February 1948 and from July 1948 to November 1948. In both of these periods, and particularly the latter, the amount of support required was greatly enhanced by panic selling, provoked by fear of further price declines. In the seven-week period from November 5 to December 24, 1947, the Federal Reserve made net purchases of bonds of $1,674 million. On the last day of that

period, the pegs were dropped sharply, and this induced heavy panic selling by holders who feared that additional reductions in the pegs were probable. As a result, net Federal Reserve bond purchases in the following three weeks were only $37 million less than they had been in the preceding seven weeks.

Heavy selling during the fall of 1948 was also stimulated by the discussion raging in financial circles over the possibility that the pegs might be removed altogether; immediately after the election the selling dried up, when investors decided that the returning administration would favor retention of the pegs.

The government bond market is, in fact, too sensitive for "orderly adjustments" to be feasible over any significant range. As the pegs would gradually be lowered, the Federal Reserve would find itself confronted with ever heavier selling pressure at each step. Such an "adjustment" could hardly merit the adjective "orderly." Indeed, the inflationary effects of such large-scale Federal Reserve open-market buying would be much greater than if the authorities explicitly promised that the 2½ per cent long-term anchor would be protected.

The easing of inflationary pressures in 1949 has made the Battle of the Pegs a somewhat academic issue for the present. Its lessons, however, should be relevant for the future. I think we must have learned that monetary policy is too blunt an instrument by itself for effectively controlling inflation in a period of widespread shortages of goods; we have devised more effective and selective non-monetary measures which can do the trick better, as the wartime experience suggests. One cannot, therefore, easily ignore the unsettling effects of a money squeeze which sharply depresses government security prices.

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Gold and International Equilibrium

Metzler's excellent chapter on international trade theory in *A Survey of Contemporary Economics* calls the "modern" theory of the gold standard incomplete.[1] By this he means that the reactions it describes probably are insufficient to restore an equilibrium once it has been disturbed. If country A increases its imports from B, a deficit occurs in A's balance of payments. Irrespective of whether the deficit is initially financed by flows of gold or short-term capital, under the modern theory income and employment expand in B's export industries. Secondary spending of these incomes stimulates output of consumption goods in B, which, in turn, stimulates investment. As incomes rise in B, so do imports. The initial rise in exports thus is partially or wholly offset. However, "the conclusion of most economists seems to be that, except under unusual conditions, the adjustment of a country's balance of payments by means of income movements is likely to be incomplete."[2] Therefore, "the new explanation . . . normally accounts for only a part of

[1] Lloyd A. Metzler, "The Theory of International Trade," in Howard S. Ellis, ed., *A Survey of Contemporary Economics*, (Philadelphia, 1948), Chap. 6.

[2] *Ibid.*, pp. 219-20.

the adjustment and thus constitutes a theory of disequilibrium as well as a theory of equilibrium."[3]

Metzler's account implies, albeit in a backhanded way, that the classical role of gold inflows in increasing bank reserves, lowering interest rates, and increasing loans and prices is almost completely omitted from the modern theory. Thus he says, "Perhaps the most important single feature of the new concept is its comparative independence from banking policy."[4] The income effects continue to perform their equilibrating rôle even though the central bank offsets the gold flow. "Unless domestic investment were highly sensitive to a change in interest rates, . . . such action would not stop the rise of employment which was initiated in the export trades, and the adjusting process would proceed as before."[5] This almost complete rejection of the classical mechanism apparently rests on two considerations: (1) belief that investment is insensitive to interest rates; and (2) belief that international demand is inelastic to price changes in the short run.

Since the classical mechanism is rejected and income effects are incomplete, the way is open (though Metzler does not say so) for a chronic shortage of one currency such as dollars even under gold standard conditions. This raises an interesting question: why was the gold standard so successful prior to World War I? Is there not something more to the gold standard mechanism than the modern theory describes, something which in the absence of rigidities produces either complete equilibrium or at least an oscillation about the equilibrium position?

In my opinion, a part of the classical mechanism must be retained in gold standard theory. While I share the conviction that in the short run investment is insensitive to interest rates and demand is inelastic with respect to prices, the long run is a different matter. An addition to gold reserves in the pre-1914 era may not have increased investment and prices immediately, but subsequent business cycle expansions resulted in greater increases of bank deposits and higher money incomes and prices than would otherwise have been the case.[6] In the nineteenth century, business booms, at least in the United States, almost invariably resulted in money stringency, indicative that expansion of credit by the banks was limited only by their reserves.[7]

[3] *Ibid.*, p. 220.

[4] *Ibid.*, p. 216.

[5] *Ibid.*, p. 216.

[6] It is conceivable that in the United States this mechanism may have partly worked itself out as an income effect. Immigration tended to increase in prosperity, diminish in depression. An accrual of gold may have made for longer prosperities (on this point see my article, "The Long-Wave Depression, 1873-97," *Rev. Econ. and Statistics*, Vol. XXXI, No. 1 [Feb., 1949], pp. 69-73) and therefore more rapid immigration. Hence, the rise in money incomes may have represented partly an increase in real incomes; and the increase in real incomes would have expanded imports irrespective of price changes. If this is so, my attempt at partial defense of the classical mechanism as opposed to income effects does not go as far as the text above indicates.

[7] The situation now may be different. At the time of writing, the postwar inflation appears to have run its course even though excess bank reserves in the United States are in the neighborhood of a billion dollars. Hence, gold flows into the United States even in

As Metzler points out, evidence of inelasticity of international demand is entirely short-run. Probably in the long run consumers and producers adapt themselves to the price changes, so that demand is more elastic. Therefore, the inflow of gold in pre-1914 times eventually increased imports and decreased exports in the classical manner. Although this part of the mechanism would usually be ineffective in the short run, in the long run it served to prevent a chronic disequilibrium in which one country tended to gain the world's gold supply.

It follows that neutralization of gold flows by central banks has not entirely lost its significance as a blow to the operation of the gold standard. It is true, as Metzler's quotation from Whale indicates, that the importance of "observing the rules of the game" has declined in our estimation as a result of the new theory.[8] But the dilemma faced by monetary authorities under the gold standard between the requirements of internal and external equilibrium was a real one.

In the words of Metzler, "the pendulum has now swung too far in the anti-classical direction."[9] The classical theory of gold flows and price changes must not be abandoned as of little importance.

RENDIGS FELS*

the long run may not affect prices and money incomes appreciably. Excess reserves at the end of a boom are not decisive evidence, however; but in any event offsetting operations by the central bank would prevent gold flows from performing their equilibrating function.

[8] *Op. cit.*, p. 216.

[9] *Ibid.*, p. 254.

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Planned Economy in Norway: Comment

While Dr. L. R. Klein[1] presents a clear and interesting outline of the system of "national budgeting" in Norway, at least two of his views regarding the general implications of the Norwegian experiment appear to be questionable.

At one point it is stated, for example, that: "one of the most evident and most striking features of the Norwegian economy is its stability since 1945."[2] When speaking of stability, Klein is primarily concerned about price stability and the protection of the real income of workers. Average hourly real wages in industry rose about 20 per cent between 1940 and 1947.[3] Since it is highly probable that average productivity fell during this period,[4] it is evident that a size-

[1] "Planned Economy in Norway," *Am. Econ. Rev.*, Vol. XXXVIII, No. 5 (Dec., 1948), pp. 795-814.

[2] *Ibid.*, p. 810.

[3] *Statistisk—Økonomisk oversikt over året 1947*, Norges offisielle statistikk, X—143 (Utgitt av Statistisk Sentralbyrå, Oslo, 1948). For information on hourly wages, p. 40; and retail prices, p. 98. See also, International Monetary Fund, *International Financial Statistics*, May, 1949.

[4] The Economic Commission for Europe, *Economic Survey of Europe in 1948*, U.N. pub. (Geneva, 1949), Table 4, p. 7. Average output per man employed during 1947 was indicated as 85 per cent of the 1938 level. No man-hour figures appear to be available.

able "inflationary gap" has developed within the economy. The low level of postwar interest rates and the very high level of investments have tended to sustain this gap.[5]

The gap has undoubtedly helped to check the expansion of export volume, which has remained at about 82 per cent of prewar during 1947 and 1948, when industrial production was 15 to 25 per cent above prewar levels, and has thereby been fundamental to the magnitude of disequilibrium in the balance of payments.[6] The high volume of imports necessary to a realization of the ambitious investment program has been the other decisive factor. Finally, a deterioration of the terms of trade with regard to freight income has also been of importance. Postwar deficits in the current balance of payments have averaged nearly 1 billion kroner ($200 million dollars) since 1946[7]; about half of this annual deficit could be attributed to the low volume of postwar exports.[8]

Thus, granting that price stability[9] has been attained and that an increase in real wages[10] has been maintained, it is not at all clear that a planned economy such as Norway's does not substitute one form of instability (that of the balance of payments) for another form of instability (that of domestic prices). Instability in the balance of payments, however, may have far more serious implications for a small country than does domestic price instability. In any case, one should not be deceived into thinking that once the magic wand of economic planning is waved, the problem of economic stability somehow disappears.

In support of this view, let me first quote certain conclusions concerning economic development in Norway during 1947, which are contained in the "Statistical Economic Survey" issued in connection with the government budget during January, 1948:[11]

There is a continuing deficit of considerable size in the national budget which

[5] The costs of German occupation were the important prime source of the gap. Price subsidies have amounted to about a quarter of current budgetary expenditures. While gross domestic investments have amounted to about 35% of G.N.P., the long term rate of interest was lowered from 3.4% to 2.5% in connection with government debt conversion during 1946. The low rate of 2.5% has been sustained.

[6] *Statistik—Økonomisk oversikt over året 1948* (Oslo, 1949). Reference to source of statistics given.

[7] *Økonomisk Revy*, Norsk Bankforening, No. 2, 1949, p. 3.

[8] *Ceteris paribus*, the current deficit would have been about $80 million a year less had export volume attained a prewar level during 1947 and 1948. Although a deficit is normal for Norway in view of postwar reconstruction requirements, it appears that direct controls and repressed inflation have diverted output from export to the home market. Export volume has, therefore, lagged far behind the growth of national product, relative to prewar, though a roughly parallel development is vital to long-run international stability and the sustenance of a high level of output.

[9] Since it was attained by means of price control, it may only imply price rigidity.

[10] *Editor's note*— A Norwegian critic of Klien, whose communication could not be published, queries the reality of the increase in real wages due to the non-availability of many consumer's goods.

[11] *Statistik—Økonomisk oversikt over året 1947, op. cit.*, pp. 94-95. Translated by the writer. A budget surplus was developed during 1948.

together with an increase in lending and the large nominal income receipts of the population has led to the growth of an inflationary gap. . . .

It is important to be aware of the fact that we, despite the general production advance since the end of the war, can not be considered to be enjoying a stable period with a uniform prosperity. The economic situation in Norway today is to a high degree unstable. Since production in 1947 did not lie appreciably above the prewar level, this higher level of production could only be sustained by a considerable import balance of trade. This import balance . . . has in large part been financed with the country's exchange reserves and by borrowing. . . .

At the conclusion of 1947 one is faced with the situation that an appreciable portion of the disposable exchange reserves have been utilized at the same time that authorities had exhausted most possibilities of obtaining additional credit. One has thereby arrived at a very serious foreign exchange situation. . . . In case further credits can not be obtained from abroad, it might be necessary to bring about a more drastic reduction of imports than that effected in connection with the reorganization of exchange policy in September . . . but should the situation arise in which it becomes necessary to reduce the supply of imported raw materials further, it may be difficult to prevent the growth of unemployment in industry.

The view stated in this official publication is quite different from that of Klein. The situation is viewed as essentially unstable rather than stable. Serious attention is paid to the difficult foreign exchange situation and the implications for domestic employment of the necessity further to reduce imports.[12] Klein found that the 1947 import surplus "in no way caused an economic crisis."[13] To him the fault was administrative and the result of forecasting errors; it could be rectified in the future.[14] The subtle underlying factor overlooked by Klein is that while no economic crisis may have as yet arisen, it is only because Norway has been able to expend exchange reserves and obtain foreign loans. Once foreign aid, credit resources, and foreign exchange reserves are exhausted, the income received from Norwegian exports and shipping will be an important factor in determining the level of national income.

The situation in Norway, and for somewhat similar reasons in Sweden also, is, at least potentially, quite unstable.[15] The question therefore remains, and a most important question it is indeed with regard to the ultimate success of E.R.P., to what extent small democratic countries such as Sweden and Norway, whose standard of living is highly dependent on foreign trade, can achieve a volume of export trade by means of direct controls (prices, interest rates and the allocation of supply being subject to control in both countries) that is compatible with equilibrium in the balance of payments at a level of

[12] The volume of imports is naturally of far greater significance to the level of production and real national income of a small country, than of a large country with adequate natural resources of all types.

[13] "Planned Economy in Norway," *op. cit.*, p. 806.

[14] *Ibid.*, pp. 806, 807.

[15] It should be pointed out that during 1948 and 1949 a large portion of the international deficits of Sweden and Norway are being covered by E.C.A. assistance. Both countries have drawn heavily in the past on their gold and foreign exchange reserves to finance their international deficits. While Sweden did not suffer a severe impairment of her capital equipment during the war, as Norway did, she has also experienced repressed inflation and an abnormally low volume of exports in relation to imports and real national income.

imports that will permit retention of present full employment levels of activity and a normal growth of productivity. Can these countries substitute direct controls for a free-price system and still bring about international adjustments with sufficient rapidity to meet sudden changes in the international outlook? Will not the persistence of repressed inflation (along with the controls necessary to repress inflation) interfere with the proper allocation of resources in this connection, prevent adequate price flexibility, and inject a high degree of inelasticity in the export supply curve? The low volume of postwar export in both countries[16] raises serious doubts, especially in view of the fact that international demand conditions have in general been very favorable for both countries since the end of the war. In addition, how will these countries meet the threat of increasing international price competition, especially in dollar markets?[17] The critical nature of these problems has been and continues to be disguised by the prevalence of foreign disinvestment, loans, and American aid.

Another general conclusion drawn by Klein was that the clause of the Bretton Woods Agreements requiring the abolition of import and exchange controls by 1952 was particularly unsatisfactory.[18] When considering Norway he says:[19] "Either the Bretton Woods Agreements must be modified (or ignored)or some round-about method adopted to circumvent the Agreements. One method would be to nationalize all foreign trade."[20] It appears to the writer that Dr. Klein has failed to prove his case; he has merely intimated what is self-evident, that the provision is incompatible with the retention of the present system of direct controls in Norway. But is not this essentially begging the issue? The writer has pointed out that the economic stability attributed to Norway by Klein may be more apparent than real, that in fact it has been sustained by a high volume of capital imports. Economic stability, if it is to be given a dynamic significance, must in the long run be measured in terms of the growth of productivity and internal adaptiveness to external change, as well as in terms of the level of employment and real wage income. The Norwegian economy has still to prove itself with regard to the first mentioned factors; a small country could suffer considerably in a world rapidly returning to price competition, if it lacked stability so defined.

[16] During 1948 industrial production was 143% and 125%, export volume 79% and 82%, of the prewar levels in Sweden and Norway respectively. Prewar = 1938. Source: International Monetary Fund, *International Financial Statistics*.

[17] For the above mentioned reasons, among others, one must be skeptical as to how much benefit can be derived from currency devaluation in a controlled economy, where repressed inflation leads to an excessive domestic use of domestic output. The threat of nationwide wage increases to offset resulting increases in living costs (thereby threatening domestic price and wage stabilization) and the restrictive provisions of bilateral trade agreements must also be considered. The issue, however, is too involved to be discussed within the limited scope of this note.

[18] "*Planned Economy in Norway,*" *op. cit.*, p. 814.

[19] *Ibid.*

[20] According to Professor Wilhelm Keilhau of Oslo, Norway, the greatest success in postwar reconstruction has been attained with the mercantile marine, the only sector where private initiative was given a free hand. See "Main Trends in Norway's Economy," *Lloyds Bank Review* (July 1948), p. 31.

The writer suggests that, because of the flexibility of a free-price economy and the possibilities for increased productivity permitted by specialization under free trade, such small nations may have an even greater stake than their larger neighbors in a return to free, multilateral trade.[21] While the level of home demand is of decisive importance (and the volume of foreign trade of secondary significance) to a large country in maintaining full employment and a high standard of living, it is clear that to a small country, lacking many essential resources, the volume and composition of foreign trade are also of primary importance, regardless of the structure of the economic system.

Such small countries as Norway and Sweden may have found a temporary solution to the "classical" problem of maintaining an adequate level of effective demand at home—though the solution has involved the existence of repressed inflation—but have they found a solution to the problem of obtaining an adequate volume of supply without resorting to capital import or foreign disinvestment? This latter aspect is also fundamental to the maintenance of high living standards and full-employment levels of activity.

When judging the stability problem of a small country, international considerations are as fundamental as domestic. In fact the two are virtually inseparable.

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[21] The interwar years provide ample evidence of the competitive disadvantage suffered by small nations which engaged extensively in bilateral trade.

* The author, who is on the staff of the Economic Cooperation Administration, is expressing personal views and not those of the organization with which he is associated.

The Least Cost Point: Reply

In the December issue of the *Review* Professor Eiteman attempts to rebut my criticisms of his earlier article attacking the validity of marginal analysis.[1] He has indicated precisely what he meant by capacity and has in some respects clarified his position, but unfortunately he has raised more problems than he has solved. These problems are so numerous that a complete examination of them would take more space than their importance warrants. I can, therefore, merely outline briefly the more basic difficulties that his answer presents.

1. He has altered his original thesis to read: Where the least cost point falls at capacity output, "marginal cost curves will no longer intersect marginal revenue curves (1) when average revenue curves are horizontal or (2) when average revenue curves are high and almost horizontal" (p. 900)—that is, under pure competition or almost pure competition.[2] This elimination of anything remotely resembling monopoly seriously limits the applicability of his theory, even if it were otherwise correct. In fact, he later (p. 903) tacitly assumes monopolistic competition (or something resembling it), in contradiction of his own original thesis.

[1] Wilford J. Eiteman, "The Least Cost Point, Capacity, and Marginal Analysis: A Rejoinder," *Am. Econ. Rev.*, Vol. XXXVIII, No. 5 (Dec., 1948), pp. 899-904.

[2] Even so, the statement is not necessarily true, since, to cite only one instance, costs may also be "high."

2. It is not "difficult to deal with a timeless-rate of production" (p. 902); it is impossible. "Rate" means "ratio"—the relation between two quantities, which in this connection are units of output and units of time. To speak in terms of "hourly output" obviously does not eliminate the time concept.

3. Professor Eiteman believes that by using the time unit of an hour he has eliminated the variations occuring in working periods when the day, week, or month is used. This is contrary to fact. He admits that the warming-up hour (is it an hour?) is different, but ignores the other variations which almost any study of hourly output will show—a rise in output during this warming up, followed by a continuous drop to the end of the day (with a reversal of trend for a short time after the lunch period, if any).

4. His final definition for capacity is "the maximum hourly output possible under normal circumstances" (p. 902).[3] In spite of this concept of capacity as output under *normal* circumstances, his next sentence states flatly that: "So defined, beyond-capacity output becomes impossible" (p. 902). That is, there is no such thing as abnormal conditions. His whole thesis, he admits, hinges on this untenable assumption.

5. By the use of an hourly output concept Professor Eiteman has vitiated his original argument in two ways: (a) He has invalidated his objections against ordinary marginal analysis, since he is not talking about what is generally considered capacity; he is criticizing the use by marginal economists of a concept which these economists did not have in mind,[4] (b) More important, he has passed out of the world of reality into the realm of fancy, for surely no businessman sits down to decide whether he will produce 700 or 800 cans of soup between nine and ten o'clock this morning (by marginal analysis or any other), but rather that he will produce so many cans this week (or month, or quarter).[5] If the curves refer to hourly output, we certainly agree that "businessmen do not construct marginal revenue and marginal cost curves nor do they operate at a scale of operation that such curves would indicate if they were drawn" (p. 903). The situation is different if the time unit is a week or more.[6]

6. In the course of his examples Professor Eiteman uses the illustration of a least-cost point at "85 per cent of capacity" (p. 903). If he considers this usual, it is an insignificant quibble to complain of Bowman and Bach putting this point at 73 per cent. His whole argument then disappears.

7. In his further example explaining what he considers to be the actual decisions of businessmen, Professor Eiteman's only reference to price is to

[3] This definition differs from the one I suggested only by the designation of the period as "hourly." I did not specify any particular time interval. I had in mind a period of a week, but the argument would apply equally to a month or any other reasonable period. With modifications it would apply also to the hourly concept.

[4] To use Professor Eiteman's original example, the graph which he cites from Bowman and Bach refers to output per *month* (*Economic Analysis and Public Policy* [New York, Prentice-Hall, 1943], p. 123).

[5] Professor Eiteman himself is forced to accept this longer time interval when he comes to his illustration (p. 903).

[6] The longer the time interval, the more likely the businessman is to use some sort of marginal analysis in determining his production.

accept without question "the price printed in catalogs" (p. 903). How was this price determined?[7] More particularly, if, under his example, the small quantity currently demanded at this price forces a drop in production and a consequent rise in average (labor) cost from 70 cents per unit (which would be possible if 48,000 units per week were sold) to 84 cents per unit,[8] would not the producer at least consider the possibility of whether a price reduction would be preferable to a drop in quantity produced?[9] This inability to explain price determinations is the central weakness of Professor Eiteman's inventory analysis, which necessarily must assume that price is given to start with, and (apparently) cannot be altered by the producer.

WALTER W. HAINES*

[7] We might assume (*cf.* point [1] above) that it was set by pure competition in the market, but this is obviously not so, for the producer in the example can sell only 28,000 units per week at this price, not any amount. This then must be a situation of monopolistic competition or some other example of administered prices.

[8] If by "average cost" Professor Eiteman means labor cost per unit of product, he has lost two zeros somewhere: the average cost should be 0.7 cents and 0.84 cents respectively. This mathematical error, however, does not effect the argument in any way, and I have used his figures.

[9] It may be well that the price cannot be changed over short periods of time, as, for instance, between catalog printings, and in this case the producer may merely adjust his production to the quantity demanded at this price for the time being. But if conditions change significantly, he will certainly consider changing the price in the next catalog, and the new price will be determined, at least roughly, by the marginal analysis.

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Economic Studies by the Joint Committee on the Economic Report*

The Joint Committee on the Economic Report, under a supplemental appropriation authorized by Senate Concurrent Resolution 26, is currently conducting studies in the fields of investment; monetary, credit, and fiscal policies; low-income families; and unemployment. All four studies were begun early in the summer and the subcommittees making them contemplate issuing one or more reports before December 31, the date set by the Resolution for the completion of the work.

The study of investment is directed toward an examination of the causes and cures of the variability of private investment, with emphasis on the relationship of this variability to over-all economic stability. In general, the subcommittee will seek through hearings and staff studies to find the factors which influence and determine business decisions to invest or not to invest. They will also go into the forms of investment contracts, *i.e.*, the debt-equity problem, to the extent it affects the flow of savings into investment; and the functions of intermediary institutions, such as insurance companies, investment companies, trusts, etc., in making direct investments or generating added investment.

The monetary, credit, and fiscal policies study will attempt to provide the

* The staff director of the Joint Committee is T. J. Kreps, the associate director G. W. Ensley. The address of the Committee is Senate Office Building, Washington, D.C.

basis of a better understanding and clarification of policies which are the most conducive to the maintenance of high levels of employment and production and of relatively stable price levels. The subcommittee will review the objectives of past monetary, credit, and fiscal policies and will be particularly concerned with the attention given in formulating these policies to the behavior of individual prices, to interest costs of the federal debt, to the prices of government securities, to the state of employment, to the rate of investment, to the balancing of the federal budget, to speculation in commodity and security markets, and to the balance of international payments. The study will cover the present instruments of control over monetary and credit conditions which are possessed by the various government agencies, including the Federal Reserve, the Treasury, the Federal Deposit Insurance Corporation, and the other federal agencies that make and guarantee loans and insure deposit and savings accounts; how these powers have developed and how they have been used; how effective the control instruments are individually; how effective they are collectively when used in such a way as to supplement each other; what the limits on their effectiveness are and the desirability of their use; and how effective the voluntary private programs are for controlling the supply and cost of credit. The monetary, credit, and fiscal policies subcommittee has already had presented to it two statements prepared by a group of outstanding economists who met September 16-18 at Princeton University to consider the fiscal aspects of the problem.[1] Additional studies are being made and hearings have been held on the monetary and credit phases of the study.

The subcommittee study on unemployment will be concerned with the causes of general unemployment and the kinds of remedies that can be applied. An initial study has been issued by the subcommittee showing the current status of employment and unemployment. It is planned that this report will be followed by another interim document to be issued in conjunction with the low-income families study which will summarize the most important federal, state, and local programs dealing with these subjects. An important part of the final study will be to develop a better general understanding of the problem of unemployment, the significance of the figures measuring the problem, and a general testing of the validity of existing information.

The study of low-income families arises from the interest in the relationship of the status of these low-income families to general economic conditions and how improvements in their status may help the economic health of the nation. The study, working within the limits of existing data on income distribution, will attempt to answer three broad questions: (1) What are the circumstances under which lower income families live? (2) What is the effect of the low production and low purchasing power of these families on the economy as a whole? (3) What can be done to increase the production and earning capacity of these families, thus making for a more prosperous national economy?

[1] See page 1263 this *Review*.

BOOK REVIEWS

Economic Theory; General Economics

The Economics of John Maynard Keynes. By DUDLEY DILLARD. (New York: Prentice-Hall. 1948. Pp. xv, 364. $3.75.)

Dudley Dillard, in his recent volume on Keynes, has pointed out in the preface that the *General Theory of Employment, Interest and Money* is not very intelligible to the undergraduate and general reader. It can safely be said that the author has remedied this lack of communication by producing a competent and thorough text for elementary students. It is particularly suitable for students because it avoids the major pitfalls and false problems that have plagued so many of the post-1936 discussions about Keynes' theories, especially those debates of literary economics.

In the preface, Dillard also explains that he has set out for himself the task of presenting an exposition of the "economics of Keynes rather than Keynesian economics." This narrow objective has, unfortunately, led him into some vulgarisms that could have been avoided by more sophisticated criticism and extension of the ideas of the master.

The reviewer has read Dillard's other works in Keynesian economics with great reward. The pieces on the relationships among Proudhon, Gesell, and Keynes were, in many ways, edifying. The author had already established himself as a leading student of Keynesian economics when he turned to the volume under review. It is only to be regretted that he did not continue more of the original scientific research that characterized his earlier works.

The author summarizes the *General Theory* and then discusses the basic concepts and properties of the system in greater detail. He defines terms; discusses consumption (multiplier), investment (the marginal efficiency of capital), interest and money (liquidity preference), interspersed with a little fiscal policy doctrine; analyzes the rôles of money wages and prices in the system; treats the problem of inflation; and finishes the discussion of the *General Theory* with a section on business cycles and international economics. Actually, the inflation and international problems fall outside the most narrow scope of the *General Theory*, as such. Other writings of Keynes are brought to bear on these two subjects. There is a final chapter on "The Development of Keynes' Thought and the Social Philosophy toward Which It Leads." Much of the material of this concluding chapter comes from his already published article on "The Pragmatic Bases of Keynes' Political Economy" (*Journal of Economic History*, November, 1946). There is also an extensive bibliography of Keynes' writings at the close of the volume.

Since Dillard has elected to follow the *General Theory* in a very orthodox

fashion, he includes many of those digressions that were not always essential to Keynes' main point. He has a splendid discussion of the concept of *user cost* (p. 68). The close adherence to the *General Theory* has led Dillard to overemphasize the importance of the theories of money and interest in relation to the problem of the determination of the level of employment. He makes much of the fact that Keynes really married the *monetary* and *real* aspects of economic life. While the reviewer is mainly impressed by Keynes' general theory of employment, Dillard is plainly more impressed by Keynes' general theory of employment, *interest and money* (italics are Dillard's). The reviewer definitely believes that one can go much more directly to the heart of problems with an analysis based on something like Frisch's time-honored distinction between the real economy and the money economy. In this analysis, the real economy clearly comes first, with the monetary aspects as refinements.

When Dillard comes to problems of international economics, he sets out from the well-known analyses of export and import multipliers. Within this framework, it is always good (employment-creating) to export and always bad (unemployment-creating) to import. How general can such a conclusion be? For economies which are largely self-sufficient or for which foreign trade is not very important, this may be a fruitful approach, but for those economies which must import raw materials and other producer goods, it is absolutely misleading. The latter have learned, well enough, that it is good (employment-creating) to import. In an international free-market system, all effects can be accounted for by introducing the terms of trade in a proper way. Import and export functions should be written with both relative prices and incomes as variables. Although it is fashionable Keynesian theory to let relative prices "wash out" of the equation system, the truly sophisticated Keynesian will recognize that foreign and domestic relative prices actually do not "wash out" and play a nontrivial rôle in a complete analysis of international propagation of economic fluctuations. One ought to be even more fundamental in the theoretical construction and work with a model that will survive price, exchange, import, and export controls. This can be done by introducing imports of raw materials and producer goods as factors of production in the technological relationships of the system. Then some quite different import multipliers will be obtained for a sizeable portion of the world.

The chapter on "War and Postwar Inflation" deviates from the teachings of the *General Theory* only by shifting over to *How to Pay for War*. In many ways, the inflation discussion is the least satisfactory of the whole book. It takes the line of delicate fiscal adjustments to wipe out the inflationary gap, with direct controls like price stops and rationing merely superimposed upon the more basic fiscal structure. This is, of course, in the Keynesian tradition of *How to Pay for the War*, but the reviewer would be inclined to reverse the order of importance of anti-inflation instruments. Price stops, priorities, rationing, and other direct controls really get the job done with a great deal of speed and flexibility, aided and abetted by fiscal policy. Dillard's interpretation of the facts of the recent U.S. inflationary experience is at variance with that of the reviewer on this point. The chapter in question is based too

heavily on U.S. experience, and his analysis might not stand up too well against the facts on Western European postwar inflation.

In the space of a short review one cannot go into all matters of criticism in great detail, but there are some specific points in the text which should be singled out for prospective readers. In transforming from income to employment (p. 35), the problem of prices should not be neglected. Production functions are defined in physical units; this point can best be made clear by working with a complete, well-defined mathematical model.

The discussion of the relationship between classical theory and liquidity preference (p. 173) is confused. It is quite incorrect to claim that liquidity preference has no place in a static classical model. Such a position does not show a clear realization of the mathematics involved in transforming from static systems to dynamic systems. There is no reason why the classical theory of utility maximization, in a dynamic setting, cannot be used to derive the equations of liquidity preference. In fact, they have. The static (equilibrium) solution of this dynamized classical model will then contain a liquidity-preference equation.

Dillard attempts (p. 197) to link the discrepancy between the interest rate and marginal efficiency of capital in the Keynesian system to the discrepancy between the market and natural rates of interest in the neo-classical system. This result is very questionable. In the discussion between Pigou and Keynes on wage flexibility and employment (p. 220), Dillard has written off the argument as a flat victory for Keynes. Some admirers of classical thought have not yet conceded victory and are continuing the debate on the basis of Pigou's article in the *Economic Journal* (December 1943), although the Pigovian analysis is seriously lacking in empirical content. The scraps of evidence that are available point in the direction of victory for Keynes. There is a rather peculiar and unsatisfactory definition of "true inflation" (p. 237) in the volume. It states that "true inflation occurs when prices rise without being accompanied by a rise in employment and output." One wonders what was "untrue" about the U. S. inflation of 1947-1948?

The characterizations of overinvestment theories of the business cycle (p. 278) do not seem to square with the customarily accepted position of this school of thought. "Overinvestment" is not to be interpreted literally or absolutely, as Dillard does, but is to be regarded in relation to an unbalanced structure of production and the availability of funds to maintain high investment with the "elongated" structure of production. On the positive side of the ledger, it should be pointed out that there is, among many good points, an interesting discussion of the labor theory of value (p. 194).

In view of the shockingly disrespectful and inaccurate references to the late Professor Rogin appearing in another review of this book, it must be stressed that it is good fortune to have some lasting evidence of Rogin's views on Keynes transmitted via Dillard. Rogin had no mean influence on Dillard's intellectual development.

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The Theory of Economic Change. By B. S. KEIRSTEAD. (Toronto: Macmillan. 1948. Pp. xi, 386. $5.00.)

This is a group of studies of the operation of the economy in the very long period when wants, resources, and technology—the customary constants—become variables. Professor Keirstead examines the effect of this variation upon aggregate demand and upon real income, its composition and distribution. The analysis for the most part is conceptual, as it must be within the compass of anything shorter than an encyclopedia, but it is illustrated along the way with material drawn from the Canadian and United States economies. An analysis of this kind, so intricate and far reaching, is a formidable undertaking and one from which less hardy men would withdraw. But it is necessary if we are to take the measure of the most important problems of economic policy.

The book opens with an excursion into methodology in order to discover how much of economic change is within the power of human purpose and how much arises from necessity. The author concludes that physical and institutional forces place a limit on freedom but these limits allow a wide area for voluntary action. It is the purpose of politics, he states, to define the proper ends of economic action while the economist's function is to propose the proper means for achieving them. Part Two examines the ideas of economic change held by Smith, Ricardo, Marx, and Schumpeter. The author finds none wholly satisfactory, and submits that economic change comes of a plurality of causes which express themselves through social institutions of voluntary design which in turn react upon the original causes. The effect of innovations and of changes in population then are studied by the familiar technique of model construction. Considerable attention is paid to partial equilibrium as well as to aggregative changes.

The operation of the firm through long periods, as demand and cost functions change, is next considered. In Parts Three and Four, there are useful summaries of some of the less emphasized aspects of partial equilibrium analysis, notably the quantitative expression of demand and the theory of the expansion path. Changes in the location of industry, with application to the maritime provinces of Canada, are studied in Part Five. The book ends with proposals for a policy governing population movements, international investment, the cycle, imperfect competition, and the distribution of income.

It must be apparent from this summary that although Professor Keirstead has ranged widely over the field of economics, his selection of subject matter clearly falls within the purpose of his book. He has presented all of this in an informal, usually lucid, style, which for the most part is pleasantly free of argot. In the review of price theory, there are, I believe, a few slips here and there, but they are unimportant to the theme of the book.

This theme is the assertion that unregulated changes in a market economy inevitably will produce stagnation from which relief will be sought either through democratic control or by the imposition of fascism or communism. The assertion has warrant in the author's belief that most industry operates under decreasing costs in the very long period, that the heavy fixed investment which this entails leads naturally to collusion as an escape from intolerable

instability, that as a result, income is distributed more and more unequally, that the enormous surpluses of monopolistic firms can find no investment outlets, finally that welfare must decline in consequence and political change necessarily follow. This is a variation on an idea now quite familiar, and, as might be expected, the names of Keynes and Hansen rumble through the book. Yet Professor Keirstead has gone somewhat beyond the familiar doctrine of economic maturity. He has examined the effect of imperfect competition in this process, he sets forth with more rigour the implications of population changes, and he has made still more emendations to *The General Theory*.

Those who are predisposed to the idea of economic maturity will find much here to sustain them. But those who are not will regret that Professor Keirstead has not lavished the same ability on demonstrating his assumptions as on reasoning from them. For it is not at all apparent to me that the optimum scale of plant requires only a few firms in an industry; indeed, my doubts were reinforced by some of the author's own footnotes. Nor is it self-evident that monopolistic firms and cartels enjoy great surpluses because the evidence, in both a theoretic and factual view, suggests the opposite. Neither am I convinced that monopolies have as much power as is suggested to subvert the freedom of the individual worker and consumer. Only if all enterprises were conducted by a single, vast monopoly (with devilish efficiency) would these fears come to reality. Finally, I cannot share Professor Keirstead's confidence in the capacity of government to do all that which he believes the market cannot do. One may agree that a *simpliste* attitude of *laisser faire* is silly to the point of being irresponsible, yet hold the most compelling doubts that the government should direct the development of resources, provide "social amenities," establish public enterprises, as well as look after the cycle through fiscal measures and continue most of its present functions. But though one may disagree with the author's answers to these primary questions of policy, he is to be commended for his forthright approach to them. It is a point of excellence in a valuable book.

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La Valeur Logique des Théories Économiques. By BERTRAND NOGARO. (Paris: Presses Univ. de France. 1947. Pp. viii, 185. 200 fr.)

La Valeur. By FRANCOIS PERROUX. (Paris: Presses Univ. de France. 1943. Pp. 400. 100 fr.)

At any time, and particularly today, the progress of economic theory is aided by books like these. Professor Nogaro analyzes the errors in logic or pitfalls in thinking which have been typical of economic theories. Professor Perroux has written a rather detailed summary of the concepts of value, indicating what he believes are the deficiencies in the views of various economists and which concept may be regarded as most valid.

Neither book makes an original contribution to economic theory, but as insightful summaries, one concerned with logic applied to economic concepts and the other, with an economic concept submitted to sharp and minute criticism, they are stimulating and suggestive and compel a good deal of re-think-

ing of familiar notions. They provide a healthy shock for economists on either side of a Ph.D. who have grown sleepy in the presence of ideas they have "heard" before. Yet in spite of success in this regard, both Professor Nogaro and Professor Perroux have failed to give as deep or clear an analysis of the problems they study as might have been given or could be made.

Professor Nogaro is primarily concerned with the use of deductive and inductive methods in economic reasoning. Through a series of brilliant critiques of economic theories, he lays bare errors which have been committed, particularly in deduction. He summarizes these typical errors in the final chapter, called Conclusions. Much of this material should have been presented in the Introduction. The readers, who will be economists and not logicians, would then have been forewarned and the body of the book, consisting of analysis of these logical failings, would have been more effective. As it is, the errors in economic thinking are clearly revealed but the nature of the failure in logic is not always as obvious.

The topics of some of the chapters will indicate the range of theories analyzed: The Quantity Theory as a Deductive Theory; The English Classical Theory of the Equilibrium of International Trade; The Theory of Bimetallism; The Marginal Theory of Value; The Concept of Capital and the Classical Theory of Distribution; The Ricardian Theory of Rent; and The Equality of Savings and Investment According to Lord Keynes.

The most frequent logical errors which economists commit, it turns out, are not peculiar to them. For one, we have a tendency—Professor Nogaro asserts it is in our subconscious—to make incorrect conversions. For example: if an increase in the quantity of money results in a decrease in its value, then a change in the value of money can result *only* from a change in its quantity. But, apparently, the majority of errors do not result from violations of the formal rules of logic. The primary source is a lack of precise definition of terms or facts ("la matière du jugement," to use his phrase). This type of error applies particularly to the most general economic concepts—price, capital, income, etc. And it occurs most often in the deductive method. The inexactness usually leads to the choice of data or illustration to "prove" an *a priori* notion.

Professor Nogaro is especially concerned (even vexed) about the errors economists commit when they deduce. He recognizes that the deductive process has its proper use, even in inductive theory, but he attacks its careless employment. He demonstrates how errors can be compounded by appealing to an accepted economic concept (itself not clearly defined) or by recourse to general principles of logic, mathematics, or economic psychology, the effect of which is to impose false corroboration or deceptive rigor.

With regard to the inductive method, Professor Nogaro indicates the familiar source of error in observation and the difficulties of gathering statistics or historical documentation. He places his confidence in the inductive procedures because he believes the inductive economists are less exposed than the deductive to "certain errors and illusions." Perhaps! It depends on how easily one falls in love with an hypothesis.

In fact, the major logical defect in Professor Nogaro's approach is his naive and vague distinction between induction and deduction. His analysis would

have been more helpful if he had kept in mind the statement of Morris R. Cohen, "That all inference is deductive and that what passes as induction is either disguised deduction or more or less methodical guesswork."[1] A recognition of this fact would have shifted the emphasis from the fallacies of deduction to the problems and difficulties of induction. Professor Nogaro has written a book on the method of political economy. It is surprising he did not see where is the greatest need.

What Professor Nogaro is saying, in essence, is that economists should be better thinkers before they attempt to think. No debate! A considerable amount of confusion could be avoided and much effort be saved if the canons of logic and the cautions of semantics were mastered and practiced. But such caveats are not enough—they do not go to the heart of the problem. We need to understand more about the genetic process of a concept—the individual psychology, the sociology and, indeed, the political science. We must know more about the choice and verification of abstractions, the problems of bridging the abstraction-reality gap, and how to meet the challenges presented by imprecise, multiple factors. In brief, while something is to be gained from a review of deficiencies of economists as thinkers, it is more important to focus on problems he faces when he is thinking at a maximum. It is not merely a question of "tightening up" the discipline. There must be a basic orientation in analysis.

Economists are usually light-hearted and irreverent about scope and method. One should be suspicious of a purely methodological approach. But economists will more likely make progress from a common basis of good thinking than through the honored tradition—the minute reconciliation of the unclear through the magic of poor reasoning. Professor Nogaro's critique is a welcome stimulant to careful analysis. The exposition is concise, the prose direct and clear. It would be an excellent text or supplementary reading for a graduate course in theory.

Professor Perroux's volume is a keen, neatly organized account of the concepts of value. His analysis is considerably fuller and longer than one could find in an encyclopedia article or a history of economic thought. There are distinct advantages in this type of treatment of major economic concepts, especially when the critical survey is based upon an orienting principle and the conclusions are clearly accumulated.

The unifying concept in Professor Perroux's analysis of value is marginalism. "It is not," he says, "a body of propositions that one can accept or reject. It is the only group of coherent and integrated explanations of economic life" (p. 294). Professor Perroux does not explicitly state his own position but it is fairly evident that he regards himself as a neomarginalist. Neonmarginalism, according to Professor Perroux, recognizes that choices are determined by all the social forces operating on individuals. The marginal utility of each good is defined in relation to all the possible combinations of that good with others and all the desires for that good (p. 219). And the time-factor is introduced in the explanation and transformation of values.

[1] Morris R. Cohen, *A Preface to Logic* (New York, 1944), p. 19.

Professor Perroux divides his survey into three parts. The first and shortest section, The Objective Theory of Value as Cost, discusses the cost concept from both the classical and from the Marxist viewpoint and briefly summarizes the familiar criticisms of them. The second and longest part, devoted to the Subjective Theory of Marginal Utility, is a thorough analysis of the diverse formulations of subjective theory of value (Böhm-Bawerk, Menger, von Wieser, J. B. Clark, H. Mayer, etc.). He describes the emergence of the concept of marginal utility, its use in the explanation of economic calculations and attempts to show how through neomarginalism the idea of marginal utility is brought into a closer accord with reality.

The third and last section analyzes what Professor Perroux calls The Objective Theories of Social Value. The terminology is confusing. When value is considered as social, it resides in society and not in individuals and is, according to Professor Perroux, objective. He includes in this group: (1) The state theory of value (the individual exists only in the state, hence the goals and preferences of the state become those of the individual); (2) "Value is a representation of a collective being, society or the group which exists outside and above its members" (p. 306). (Would not Marx's labor theory of value properly come here?): (3) Institutionalism; (4) Welfare economics. On this ancient, yet most contemporary, problem of the state and the individual, Professor Perroux's criticism offers very little help.

Indeed, the fundamental weakness in Professor Perroux's analysis of value can be found in the unclear and undefined relations between the individual and society. Professor Perroux, of course, cannot be expected to clear up confusions which have been harassing during the entire history of human thought. Yet his own position of neomarginalism, in turn affecting his appraisal of the concept of value, is filled with implications which, left unexplored, minimize the value of marginalism in any form. How much is gained by saying that our marginal decisions are determined by a complex of social forces if we cannot establish the causal and quantitative relations of those influences on our decisions? Or if, as Professor Perroux does, one depreciates the rôle of the state, society, institutions or welfare economics. Marginalism can explain the mechanics but not the formation of our economic decisions. It is, however, knowledge of the formation of our choices, in substance and process, which gives body to economics and relates economic decisions to other human values.

In his defense of neomarginalism (and the implied sovereignty of the individual), Professor Perroux has tended to play down or under-rate the sociological and political aspects in the determination of value. But these critical comments may leave a wrong impression about his book. Professor Perroux has written an excellent summary of value, a sharp, illuminating, and rewarding effort. However complex and obscure are the social forces affecting our choices, in my neomarginal judgment both Professors Nogaro and Perroux have rendered economic thinking a very valuable service.

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Price Economics. By Robert B. Pettengill. (New York: Ronald Press. 1948. Pp. xiii, 483. $4.50.)

Dr. Pettengill's work is intended primarily as a textbook for the second or intermediate course in economic theory. The book is concerned exclusively with the problem of how individual prices are formed in the product and factor markets. Accordingly, the work is divided into two sections of approximately equal length on the prices of commodities and the prices of services. This conventional organization, however, does not reflect a conventional exposition of price theory, for the author's work analytically is not wholly in the vein of the texts of Bain, Boulding, Due, Stigler and Weintraub.

The author believes that the principal contribution of his textbook to the presentation of price theory is his merger of institutional and theoretical approaches. By this statement Dr. Pettengill does not associate himself with the school of American institutionalists. Prices to him are still the center of the economist's interest; he has written a whole book to explain them. Nor does he reject the standard demand, supply, and cost curve tools of economic analysis, for he employs them constantly.

The term institutional as used by the author appears simply to express his desire for greater realism. His objection to considerable portions of modern price theory is that the models it employs are unrealistic. This objection, curious to note, is raised against the firm unit and not against the consumer unit. The model of a consumer unit as a satisfaction maximizing entity is accepted and is well presented in a chapter on indifference curve analysis. The exposition of demand theory is conventional in almost all respects.

But on the supply side the author finds much to criticize and reconstruct. An absolute model of the firm as a profit maximizing unit is held to be unrealistic. Supply prices are not determined solely by cost calculations, but by custom, law, inertia, etc. The cataloguing and description of such elements apparently makes the author feel that greater realism is achieved.

Besides the emphasis on realism, Dr. Pettengill also proposes a new classification of market situations upon the basis of the conduct of firms as well as their number. It is true, of course, that the number of firms often has a definite bearing on their conduct, but it is well to distinguish, the author insists, functional matters of market conduct from the substantive matters of market structure. It is important not only whether an aluminum producer happens to be the only producer of aluminum, but whether he will immediately cut his price if a fall occurs in the price of substitute metals. Instead of discussing duopoly, oligopoly, etc., as market classifications, Dr. Pettengill attempts to account for different types of buyer and seller behavior and to trace the major patterns of price behavior that result.

The discussion of wage rates, rents, interest rates, and profits in the second portion of the book upon the whole follows conventional lines, except for some of the author's views on interest and profits. Some instructors may possibly be bothered not so much by the book's unconventionality at points as by the fact that despite its size and systematization, it is at all times a work solely on

how specific prices are determined. The relationship between prices and the general level of employment is entirely neglected. The interest at all times is in individual prices, never in the pricing system as a unity. Despite an introductory chapter on the nature of economics, no real justification is made as to why the economist should be so concerned about explaining prices; no detailed discussion of the functions performed by the pricing system appears.

All this is probably a product of the author's basic distrust of the practical content of modern price theory. The significance of monopoly to the economy is dismissed in just two pages (189-191). The fact that monopoly distorts the allocation of resources receives no attention. To the student the only objection to monopoly to be derived from the text is that it affects the distribution of income. Nowhere does the text show that any policy conclusions may be drawn from the framework of price theory: the explanation of individual prices appears to be the only purpose of the book.

The author has apparently devoted much effort to precision and clarity in attempting to make this a successful textbook for students. While the style of the book is not lively, it is concise. Each chapter begins with a statement of the specific questions that the chapter is designed to answer and closes with a good summary. It may well be that this book will have a definite impact on the form of future textbooks.

A. MORGNER

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Enterprise in a Free Society. By CLARE E. GRIFFIN. (Chicago: Richard D. Irwin. 1949. Pp. xiv, 583. $5.00.)

This book is a timely and useful addition to the literature of American capitalism. Within its 573 closely printed pages of text, containing more than 250,000 words, Professor Griffin has given a systematic and scholarly treatment of enterprise in American society—its functions, motivations, consequences, and environmental conditions that facilitate it.

The star in Professor Griffin's cast is the entrepreneur. The author assigns him the leading rôle because he holds that the supply of enterprise is peculiarly important to the progress of an economy organized on a basis of private enterprises, competition, and free markets. Some members of the audience will, no doubt, object to the playwright's preoccupation with one character in the drama. This critic shares his view that the entrepreneur has too long been taken for granted and been cast in minor rôles, while other actors have monopolized the stage. It is high time that the enterpriser's talents be displayed, understood, and cultivated, if the play is to continue to command public support at the box office.

The book is divided into three Parts, the first of which treats the rôle of business enterprise in economic expansion. Part II deals with the environment of social groups and attitudes, public laws and regulations, that influence enterprise. Part III states the philosophy of liberalism, into which the propositions of earlier chapters are synthesized.

The author emphasizes the need for continuous secular expansion of the

American economy. Advancing science and technology force expansion, as do the imperatives of national security in an ideologically divided world. This expansion is required to provide psychologically satisfying opportunities for people, to create outlets for increasing savings, and to alleviate poverty. Economic expansion comes about mainly as a result of decisions by businessmen to initiate new firms or to re-equip or enlarge existing firms. Therefore, contemporary society needs most of all an adequate and increasing supply of enterprisers. To induce expansive decisions by them, motivations must be sufficiently strong. The author analyzes economic incentives, non-economic rewards of power, prestige, social approval, etc., and the general aura of public confidence and optimism which may be the most important motivating factor of all. The prospect of profits is a decisive incentive, and the author develops a theory which treats profits as a *combination* of (a) reward for assumption of risk, and (b) differential return for relatively great efficiency in management. The more rapid the progress of the economy, the larger must be factor (a), because progress means change, and change creates uncertainty and risk. A profit-and-loss economy is more endangered by lack of popular understanding of, and faith in, the social functions of profit than it is by want of investment opportunities or oversaving.

The business firm is itself a social entity, under strong impulsions to expand for its self-preservation, to meet current demand in its market, to hold its position in its industry, and to reduce the burden of overhead costs per unit. In an economy in which competition is necessarily imperfect, these motivations of the firm explain the business *policies* that are characteristic of American enterprises—increasing sales volume, encouragement of product and market research, low-margin high-volume pricing, direct reinvestment of part of earnings, rapid replacement of equipment, management instead of stockholder control of policies, executive incentive devices, and much rivalry *within* the large corporation as between its product divisions.

The incentives to initiate a new business are different from, and must be stronger than, those sufficient to induce expansion of existing firms. Prospective entrepreneurs are unaffected by such negative incentives as desire to minimize losses or to maintain a "share of the market," which affect established business even when they are unprofitable. A unique advantage of the competitive economic system—which provides a powerful stimulus to progress—is that it possesses a large number of decision-making centers. Hence the creative, innovating *minority* of firms exercises decisive influences over the passive majority, and forces the latter to adopt the newer, more efficient techniques in order to survive. The historical record of American production, and productivity, indicates that the various incentives to expansion that have operated in the past have been potent enough to produce a highly satisfactory performance.

In regard to the environment of enterprise, the author holds that entrepreneurship is relatively a scarce factor of production, and public policies must be re-examined from the point of view of their effects upon entrepreneural incentive. A new conception of "competition" is needed. The classical theory of "perfect" competition, in which price is the only variable,

is not a feasible norm for a progressive economy. Research and technical progress are conceivable only under "monopolistic" competition; they tend to broaden the range of alternative products open to buyers and sellers in the market, and to create and maintain an effective rivalry which is the essence of true competition. "Perfect" competition could exist only in a static economy. While there have been changes in the nature of competition, there is no evidence of a "decline" in competition in any significant sense. The state has erred, not so much by failing to break up concentrations of economic power, as by deliberately fostering monopoly through tariffs, "fair-trade" laws, agricultural programs, labor union legislation, etc.

The patent system comes in for an examination in connection with its effects on invention and innovation, and receives a clean bill of health. The federal tax structure is probed, and found wanting in its discrimination against income derived from corporate profits. Labor-management relations are scrutinized, and Professor Griffin finds collective bargaining on an industry-wide basis adverse to economic expansion. He commends, instead company bargaining with independent company unions. There are chapters on the price level, and on foreign trade and economic expansion.

Professor Griffin's two final chapters concern the philosophy and the present crisis of liberalism. Here he gives a succinct statement of the classical liberalist position regarding the relation of the individual to society, and he points to the great achievement of the Western world under these concepts. He asks why, in the face of these achievements, the liberal philosophy and policy has undergone so rapid a decline during the present century. This brings him to the fundamental issue posed at the beginning of the book: How may the fact of growing economic interdependence, with the appurtenant search for personal "security," be reconciled with the aspiration for individual freedom? Professor Griffin answers that there is *no* ultimate reconciliation, but there is a satisfactory compromise. The contemporary liberal (in the old-fashioned sense) must advance a positive program, including vigilance to preserve personal rights, dispersion of economic power in the hands of all private groups, establishment of minimal "floors" of security, mitigation of extremes in wealth through taxation, and equalization of opportunity through the extension of education.

Viewing the book page by page, the critical reader will find that most of Professor Griffin's concepts and propositions are not unfamiliar. Different aspects of the relation between business enterprise and economic expansion have been treated by many writers. The profit theory stated long ago by F. H. Knight greatly exceeds in clarity and consistency that advanced by Professor Griffin. The treatment of public policies from the point of view of entrepreneurial incentives bears many similarities to the monographs and policy statements issued during recent years by the Committee for Economic Development. The liberal philosophy and program evidently owes much to the late Henry C. Simons, David McC. Wright, F. A. Hayek and others of their stamp.

Yet the book as a whole possesses a certain strength and freshness, which may be attributed to the consistency with which all subjects are oriented

to enterprise. It succeeds in drawing together between two covers a more complete—albeit imperfect—treatment of enterprise as a productive factor than has yet appeared. It thus achieves a useful purpose, different from those of conventional treatises on business economics, business policy, or public policy. Professor Griffin is not concerned with the formal economic theory of the firm, or with the technical details of business policy. His pages contain no algebra, geometry, charts, or graphs. They do reflect understanding of business and economic processes, intellectual balance, philosophical grounding, and historical perspective. If used together with one of the analytical works, the book should provide good textual material for intermediate courses offered by departments of economics or university schools of business.

A number of the more important errors and omissions may be noted:

1. Business cycles are so well recognized and important a phenomenon in the American economy that a book devoted to enterprise could reasonably be expected to examine the impacts of economic fluctuations upon entrepreneurial behavior, as well as the repercussions of business decisions upon the general economic situation. Even assuming strong secular growth, enterprise must still counter with short-term cyclical fluctuations. The book is silent on this subject.

2. Professor Griffin does not meet *directly* the Keynesian argument that the price system under modern conditions is ineffective in dealing with chronic under-employment of resources. Inferentially, he does deny the validity of this idea, but a sharper and more specific treatment of this subject is called for.

3. The book contains virtually no empirical evidence to buttress the author's generalizations about American business policy. Professor Griffin cannot be censured too heavily for this omission, because there is a lamentable want of verified and organized knowledge about the policies and actions of business executives under various conditions. The author might have been expected to make reference to such empirical studies as are available, and to point to the opportunities for empirical research that his study revealed.

4. The treatment of profit theory is confusing and ambiguous. "Profit" is used—often in the same paragraph—to embrace a variety of components, and it is difficult to know when the author uses the accounting concept of "net income available for stockholders," when he means the rate of interest, and when he refers to economic profit as a payment for aversion to bearing uncertainty.

5. The value of the book would have been enhanced by more complete references to other scholarly works. In many instances particular topics dealt with by Professor Griffin have been treated with greater clarity or fullness in earlier works by other writers. Thus, Beardsley Ruml developed admirably the relation of business enterprise to personal freedom, and the rôle of business as a social institution, in his *Tomorrow's Business* (1945); A. D. H. Kaplan contributed a valuable discussion of the economic rôle of new and small enterprises in his *The Special Problems of Small Business* (1948); Harold M. Groves made a penetrating analysis of the effects of federal taxes upon business decisions and alternative plans of federal tax reform in his

Taxation and Economic Progress (1946). The reviewer was unable to find references to these and other significant works, and was left to wonder whether the author had examined them, and if so, why he had ignored or rejected them.

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The Proper Study of Mankind: an Inquiry into the Science of Human Relations. By STUART CHASE. (New York: Harper. 1948. Pp. xx, 311. $3.00.)

"When it was suggested by Donald Young of the Social Science Research Council and Charles Dollard of the Carnegie Corporation that I run a kind of chain and compass line across the whole front of the sciences devoted to human relations, I was immediately interested. It connected with a deep and fundamental quest for certainty which had troubled me for years."

Such, writes Stuart Chase, was the cue for his new book. And the major question to be asked? "How far has the study (of men) progressed in two hundred years?"

"It called for an answer on a scale that the intelligent layman could grasp. The answer must get the subject into clear perspective and reasonable proportion, and it must not deal exclusively in high abstractions. It must offer concrete evidence to illustrate what has been done in the various fields of social science, and point out what gaps need to be filled."

Mr. Chase sets about his task with energetic vigor. And he has succeeded in writing an interesting and useful book. As will be remembered from such earlier works as *The Tragedy of Waste, Rich Land—Poor Land,* and *Idle Money—Idle Men,* Stuart Chase is a reformer who is basically optimistic about our capacity to solve our own problems, once we have defined them. He places his principal faith in "science" and the "scientific method" and gives no indication that he is troubled by the crumbling of spiritual foundations in modern life.

The Proper Study of Mankind is primarily concerned with providing an over-all impression of the current status and future prospects of the sciences concerned with *group behavior*—particularly cultural anthropology, social psychology and sociology. These new sciences are having a substantial vogue at the moment and, if I may indulge a critical streak, I would say that along with a number of others Stuart Chase is over-impressed with their scientific character and accomplishments compared to the disciplines of history, government, and economics. Not that I personally quarrel with many of his strictures against "Ricardian economics," but it seems hard to endorse the statement that "of all the social sciences, economics, along with political science, has the weakest theory structure." It is weak, no doubt, in its lack of verification, but is it weaker than the *theory* of group behavior?

I also wish it were possible to encourage careful observational and experimental studies designed to test hypotheses and to create an additive science

of man and still recognize that the most original and arresting hypotheses to test may come from people who take a more philosophical approach.

Consequently, I am troubled by the implications of the distinction that Mr. Chase feels "very important" between two wings of social science. "Far out on one side are the personal speculations of great men like Aristotle, Hobbs, Marx, and others not so great. Nobody knows whether what they say is true or not. Far out on the other side are the plodding note-takers in clinic, Congo village and laboratory, putting down what they see and hear. They are accumulating a solid core of truths. . . . Is Toynbee writing history or theology? Is the capitalist system mature? Listening to this constant buzz soaring up the ventilators of practically any department of social science, one suddenly realizes that the senators (debating the National Science Foundation Bill) had a reason for being confused. They had not analyzed the social disciplines to find the distinction between the scientific method and mere speculation. If they had done so, they might have been willing to subsidize projects like selecting pilots, but not *The Decline of the West* or *Das Kapital.*"

I regret that Mr. Chase finds it significant to labor this distinction. What seems crucial is that we should establish a continuum between theoretical speculation and "plodding note-taking," *both* being essential elements in any progress we may make toward understanding man.

But so much for criticism. What does Mr. Chase find in his survey of significant work now going on in the social sciences? This represents the main body of the book and is difficult to review because so much ground is covered. What he reports, after an extensive but inevitably spotty survey of research in progress, is that "the study of mankind" is showing healthy signs of new development and already has much to be proud of.

There is a chapter, for example, called "Revolt in the Desert," describing the work of a group of social scientists who "left their laboratories, clinics and field work to make a study in a community boiling with frustration and aggression"—the Japanese-American camp in Poston, Arizona.

In "Darkest Middletown" Chase reviews a series of sociological community studies from the Lynd's pioneering work to Lloyd Warner's *Yankee City*. Elton Mayo's Hawthorne experiments at Western Electric are given high praise, as also the work of Elmo Roper in polling public opinion. Honorable mention goes to Yale's Institute of Human Relations for its work on learning theory; to Arnold Gesell's Clinic of Child Development, also at Yale; and to the M.I.T. Research Center for Group Dynamics (now at Michigan) for its work on communications.

Economic research is given shorter shrift. But Colin Clark's "analysis of shifts in occupations," "the definitive work of Berle and Means on the modern corporation" and studies of the Gross National Product are specifically and favorably mentioned. As general advice to economists, Mr. Chase urges more testing of theories and the development of team work with other social science disciplines.

Curiously enough, considering the title of the book, there is very little reference made to the work being done by psychiatrists and others on the

study of personality. I would think myself that the analysis of the individual should go hand in hand with studies of group behavior in progressing toward a "science of man."

Perhaps Mr. Chase's most important contribution is to stand up publicly before a large lay audience and say, in effect: "Although the social sciences are still groping, they already have made important contributions to the solution of *practical problems*. And for those of you who are doubtful, here specifically are some of the things they have done. Do you not agree that this is an impressive beginning and that we should take heart from the progress being made in forging new social engineering tools?"

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Economic History; National Economies

British Economy of the Nineteenth Century. By W. W. ROSTOW. (Oxford: Clarendon Press. New York: Oxford Univ. Press. 1948. Pp. 240. 15*s*; \$4.00.)

Professor Rostow has given us in this volume a stimulating and lucid group of essays which impinge on many aspects of theory and history. They are bound together by their concentration on Britain's economy from 1790 to 1914—a period which, the author suggests, lends itself to unified study - and by their concern with combining the disciplines of economic theory and history. The author expresses the hope that a study of the nineteenth century economy will be useful in that it appears possible that "the era of planning which confronts us will, in the end, attach a greater premium to the tools of classical economics, and their recent extensions, than the pathological inter-war years" (p. 2).

The first four chapters contain analyses of various movements in the British economy. This survey opens with a most interesting contribution to the study of long waves. Rostow's principal concern is with the various trend movements in real wages which may be detected during the course of the century. Emphasis is laid on the "shifting balance between productive and unproductive outlays; and among types of productive outlays with differing yields and differing periods of gestation" (p. 12). This is a most interesting concern with the dual effect of investment in creating income and in creating productive capacity; and the author pursues his theme with a deft manipulation of highly relevant statistics. Yet it cannot be said that he is wholly successful. We should need more detailed knowledge of the variations in the lengths of the gestation periods of different investment undertakings; and in view of the composition of the index of real wages used here, we may perhaps query the closeness of the connection envisaged between the cheapening of *industrial* products and the rise of real wages. In particular, we may ask whether a more important place ought not to be given to the terms of trade. But while we pose these questions, we should remember how brief is Rostow's treatment and how remarkably rich it already is.

Chapter II draws our attention to cyclical movements. Pointing to the

existence of minor cycles interspersed between the major, especially in the first half of the century, Rostow notes the predominance of consumption goods in British exports during this period and dilates on the possibility of an inventory cycle in foreign trade. Then, after a brief review of the data on the amplitude of the nineteenth century cycles, he gives a few skilful pages on four factors involved in them: the cyclical behaviour of British harvests, commodity prices, long-term investment, and the Bank of England. An adequate assessment of the significance of these forces would require their being set in the larger perspective of a more rounded examination of these cycles, and it is to be hoped that the author will one day do this for us. Within its present scope, however, his analysis might be improved by an examination of the interconnections of the forces with which he deals. Might not harvests, for instance, have something to do, through their effects on wage costs, with the behaviour of commodity prices?

After these general pictures of the century as a whole we have two essays on aspects of the "Great Depression" in the second half of the century. Professor Rostow contests the view that this was a depression period, and remarks on the high *average* level of employment. His explanation of the events of the period turns on the growing foreign competition which was besetting the British economy; and on the disposition of investors to seek domestic rather than foreign outlets for their funds—a reversal of their policy in the previous few decades. The second essay on the "Great Depression" treats of the movements of real wages between 1873 and 1886. Having a smaller field to cover than in the opening essay, the author is able to deploy his arguments in greater detail and we get some idea of the fullness of the analysis which would appear in an expanded version of Chapter I. A rise in real wages is related not only to the characteristics of investment in the same period, but also to long-term investment in a previous period; and "an element in the increase of real wages was the favourable trend of the terms of Britain's foreign trade" (p. 100). The chapter closes with a few pages on income distribution; and the appendix (pp. 226-35), criticizing Kalecki's theory of distribution, should be read in conjunction with them.

From cyclical analysis we turn to two chapters on the complex interrelations between economics and politics. Rostow's primary concern here is to show the close connection between legislation and current economic events, but we might suggest that the order in which the chapters appear to be reversed. The second gives a skilfully balanced disquisition on the interplay of economic, political and social forces, while the first is in the nature of a more detailed essay on what may be done with a part of the framework sketched in the second.

The volume closes with two contributions to the history of economic thought—the impact of the "Great Depression" on theory, and Bagehot's trade cycle analysis—; and, finally, a detailed and adroit survey of the years 1874-1879.

In sum, it is a rewarding book, richly deserving attention.

A. D. Knox

The London School of Economics

Japan's Economy in War and Reconstruction. By JEROME B. COHEN. (Minneapolis: University of Minnesota Press. 1949. Pp. xix, 545. $7.50.)

This comprehensive study of Japan's economy from the early 1930's through 1948 is an outstanding contribution. Until now, despite the magnitude of the American war effort against Japan and our maintenance since her surrender of an occupation accompanied by large expenditures for relief and economic rehabilitation, American economists have published remarkably little analysis of the country that was our Pacific enemy in World War II. The principal published materials available heretofore have been, first, the prewar study of Mrs. Elizabeth Schumpeter and her associates, and, second, the extensive postwar reports of the U.S. Strategic Bombing Survey, which remain the greatest single body of material on wartime Japan readily available to American scholars unfamiliar with Japanese sources. Professor Cohen, an economist who was a Navy Japanese-language officer during the war and a member of the Bombing Survey, has studied the material produced by the Survey and a vast array of other documents, both American and Japanese. This book is the highly successful result.

Commencing with a chapter on the decade-long preparations before 1941, Professor Cohen proceeds to portray in detail the anatomy and pathology of Japan's war economy and concludes with a chapter on the major economic features of the occupation. Many more words will surely be written about the occupation, but this study of the war period is not likely to be superseded very soon. His Chapter II, "War Years—Overview," is a valuable summary.

Japan's defeat is shown in this book to have resulted primarily from the paralysis of her economy through Allied blockade. With about six million gross tons of shipping (steel ships of over 500 tons) on December 7, 1941, plus over four million tons built or captured during the war, Japan had only about half a million tons in operation on August 15, 1945. Japan's island economy, dependent upon large imports of food, petroleum, and industrial raw materials, could not have functioned much beyond the actual date of surrender even if no American bombs had fallen on Japan. The effects of Allied attacks on Japanese shipping appear to have been seriously underestimated by both Japanese and American leaders. It was not until after the loss of Guadalcanal that a full-scale Japanese ship-building program was undertaken, although considerable effort went into the expansion of facilities for processing raw materials that the Japanese hoped to import from the conquered areas. On the American side, the damage done to Japan by blockade was so incompletely understood that planes were sent over Japan from great distances and at great expense to drop bombs on steel and aluminum plants and oil refineries already idle from lack of imported raw material. One is tempted to speculate about the probable course of the war—and even of the occupation—had the importance of blockade been fully appreciated from the start. Professor Cohen shows that factors other than ship losses had relatively little effect on the approach of economic collapse. He believes that Allied bombing played a large rôle in persuading Japanese

leaders to "recognize the facts," but he does not attempt a complete evaluation of all the non-economic factors that led to the political decision to admit the imminence of defeat and offer to surrender.

It was not until the end of 1942 that Japan's leaders realized her predicament, and only then were plans made for all-out economic mobilization. The peak in raw material imports came in 1943. The output of finished munitions and other end-products reached a maximum in 1944, when gross national product also reached its highest level. Professor Cohen finds that the strenuous efforts of 1943 and 1944 yielded creditable results, considering Japan's basic limitations. But there was no escape. Within the narrowing limits of her freedom of action, Japan faced the problems of priorities, allocations, prices, labor, finance, and the many other aspects of economic management in modern war. Professor Cohen discusses them at length and shows that the Japanese bungled the job in various respects.

No single, cohesive group controlled the Japanese government and bureaucracy or, consequently, economic mobilization. The Army, Navy, and big business struggled for power, and no group won a clear and decisive victory before they all went down in defeat. No basic raw material was completely subject to the ultimate allocating control of any single person or group. In most cases the Army took what it could, the Navy did likewise, and the civilian economy did without, to a point where productive efficiency was very low. When civilian authorities handled allocations, as in the case of certain non-ferrous metal supplies, "The Army and the Navy each made totally arbitrary demands and refused to furnish even the Government, to say nothing of the control association, with any details of the use to which allocations were put" (p. 64). By a short-sighted draft policy, by lack of adequate training programs in industry, and by other means, the Japanese produced an acute manpower problem; plants had many workers but little skill and little output.

This book contains certain errors and inconsistencies, mostly small and of minor significance. One weakness is that, despite a long and very useful index, it is at times hard to locate information in the book, which appears to be organized and written as much for consecutive reading as for reference purposes. Also the charts, placed together at the end and not very attractively reproduced, are much less useful than they could be. Such minor limitations do not seriously detract from this major work.

WARREN S. HUNSBERGER

Chevy Chase, Md.

The Allied Occupation of Japan. By EDWIN M. MARTIN. Published under the auspices of the American Institute of Pacific Relations. (Stanford: Stanford University Press. 1948. Pp. xiv, 155. $3.00.)

Occupation policy in the former enemy countries deserves careful study by economists. This relates not only to the economic outcome in Japan and Germany, which will obviously affect competition, stability, and economic development in many parts of the world. There is, in addition, a professional

opportunity here to observe in high relief the tendencies, provincialisms, and internal conflicts of our own economic thinking.

The present volume is one of a series on postwar Japan sponsored by the Institute of Pacific Relations.[1] Mr. Martin's book is concerned chiefly with policy, and is only secondarily concerned with the successes and failures of the Occupation to date. Roughly half the text deals with specifically economic issues, the remainder being concerned with matters of administration, demilitarization, democratization and social reform. Each section leads off with citation of the relevant passages from the basic Occupation documents, which are provided in full in handy appendices.

It is a conspicuous and rare excellence of this book that it maintains a comprehensive and balanced treatment of a highly controversial subject. Credit should go to Mr. Martin's own flexibility of mind, as well as to his intimate knowledge of the issues (he was formerly Chief of Occupied Area Economic Affairs in the Department of State). Especially notable is his judicious treatment of the complex reparations issue, underlining the dilemmas which have been inherent in this issue from the beginning, and recounting the protracted negotiations. This discussion helps to explain the recent U.S. declaration terminating Japanese reparations, a declaration which was treated by the press as simply astounding.

This book's coverage extends only to the end of 1947. This span permits Mr. Martin to present the various aspects, interests, and considerations, and to hold them in solution, as it were; whereas after mid-1948, the pressure of events precipitated the elements out of solution, deposited them in patterns of sharp contrasts, and forced the Occupation authorities to make selections and rejections which have evoked storms of protest.[2] It is testimony to Mr. Martin's insight that he discusses in one connection or another most of the issues which have since come to a head, including not only reparations payments *versus* termination, but also: the deconcentration program (especially in the version of attacking bigness as such), *versus* the encouragement of industrial operations; the encouragement and even license previously accorded to labor, *versus* efforts to restrict certain strikes, maintain wage-ceilings, and reduce overstaffing; demands for budget-balancing and corresponding "austerity," *versus* measures to stimulate the revival of production and *versus* desires to raise levels of living (especially as an encouragement to democratization); insistence upon tighter government controls (especially over allocations) and upon new forms of SCAP intervention, *versus* desire for rapid decontrol and the original policy of giving the Japanese government primary responsibility for the Japanese economy.

Most of the actions recently taken on these issues are designed to rehabili-

[1] Other volumes already published in this series are: Harold Wakefield, *New Paths for Japan*; T. A. Bisson, *Prospects for Democracy in Japan*; Jerome B. Cohen, *Japan's Economy in War and Reconstruction.*

[2] Mr. Bisson's book, mentioned above, is an outstanding example of such protest in the same IPR series. Among Asiatic spokesmen, the Chinese communists on the one hand, and General Carlos Romulo of the Philippines on the other hand, have been particularly vehement.

tate the Japanese economy; but they operate, to some extent at least, at the expense of social reform and associated objectives of SCAP and of American ideology in general. It is becoming increasingly clear that the Occupation of Japan faces not only the ordinary problems of rehabilitating a devastated country, torn between lagging production and tugging inflation; but also is struggling to do this job on American principles which are not always consistent with each other, let alone consistent with Oriental traditions. Furthermore, these principles, developed for our own advanced economic situation, tend to overlook the needs of an industrialization which has been suspended in mid-course, and which calls for further industrial expansion to relieve agrarian pressure, requires a certain concentration of income-flow or other devices of forced saving and capital formation, looks for enlargement of foreign trade, and still depends upon low production costs (including perhaps low labor costs relative to Western competitors).

The actual outcome of all these contradictory pressures is still in process, on both the ideological and the operational levels. This should provide a fascinating subject for a follow-up study of the Occupation in its later stages.

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La Planification en Tchécoslovaquie (Le Plan biennal). By GUY BRAIBANT. (Paris: Armand Colin. 1948. Pp. 160.)

This study appears as one of the Cahiers de la Fondation Nationale des Sciences Politiques, a semigovernmental institution aiding research in the social sciences. Written by a young French economist, it describes the genesis, contents, methods and results of Czechoslovakia's two-year plan, carried out between 1946 and 1948. Although the plan is now a matter of history, having been superseded by the far more ambitious and revolutionizing five-year plan, it deserves much more study than it has received up to now. There are plenty of all kinds of plans abroad, but none representing comprehensive and specific planning for a country already having achieved a high degree of technological development, industrialization, and dependence on foreign trade, such as Czechoslovakia. The study is well organized, adequately anchored in theoretical concepts and contains a fair amount of statistical material.

Its weakness lies in somewhat onesided reliance on official data, which leads the author to emphasize the successes of the plan without much reference to its failures, *e.g.*, in the building industry. The same source material is probably responsible for the statement that the Czech economy from 1918 to 1945 was in a colonial state of dependence on foreign capital, whereas in reality it was even exporting capital during at least part of that period. It would certainly be difficult to prove that the leading banking concern, that of Zivnostenska banka, which virtually controlled Czech industry, was a tool of foreign capital. Aside from a few mistakes of this kind, the study should prove useful to all students of modern planning.

FRANK MUNK

Reed College

Land in California. By W. W. Robinson. (Berkeley: University of California Press. 1948. Pp. xiii, 291. $4.00.)

Gold is the Cornerstone. By John W. Caughey. (Berkeley; University of California Press. 1948. Pp. xvi, 321. $4.00.)

The economic development of California, with many unique features distinguishing it from the general pattern of development of the national economy, has seldom been singled out for specific analysis. Economic history texts give only brief mention, and general histories of the state treat economic development in incidental fashion. Much of the best work in the past has been found in specialized studies such as the Stanford University Press series on transportation,[1] and descriptions of certain periods, of which R. L. Underhill's *From Cowhides to Golden Fleece*,[2] based upon the papers of Thomas O. Larkin, American Consul in Monterey, is one of the outstanding. Thus, of particular interest is a new series published by the University of California Press in commemoration of the state's centennial, entitled *Chronicles of California,* designed to present a survey of all phases of development of the state.

The two volumes thus far available in the series which relate to economic aspects deal, respectively, with problems of land ownership and the direct significance of the gold discoveries. The author of *Land in California,* W. W. Robinson, has long been affiliated with the title insurance business in the state. The volume presents a comprehensive survey of the questions of land titles and land ownership from the period of earliest Spanish settlement down to the present time. The origins of the Spanish and Mexican grants are explained in detail; at least a third of the book is concerned with the situation prior to the American conquest. In contrast, relatively little space is allocated to the problems of American treatment of the earlier grants, and inequities involved in this treatment are minimized, in contrast to the attitude of many other writers. The problem has always been controversial, primarily because the actual breakup of the ranchos, caused to a large extent by the methods of handling claims, facilitated development of the state, though it involved failure to keep in good faith the provisions of the Treaty of Guadeloupe Hidalgo. Latter sections of the book are concerned with problems of railroad land grants, the almost unknown effects of the federal land-script laws, the development of title insurance (an almost universal practice in the state), and related questions. In general, Robinson emphasizes the more technical aspects relating to land ownership and distribution of land, and devotes less attention to socio-economic effects of various policies and occurrences, although the latter are not completely neglected. The effects on the economy of the Spanish-Mexican land grants and their treatment under American rule, for example, are developed much more adequately in R. G. Cleland's excellent study, *Cattle on a Thousand Hills*.[3] In addition to the land grant question, other controversial issues—large-scale land ownership in the last seventy-five years, the

[1] Particularly, O. O. Winther, *Via Western Express and Stagecoach* (1945); Jerry MacMullen, *Paddle-Wheel Days in California* (1944); and Gilbert H. Kneiss, *Bonanza Railroads* (rev. ed., 1947).

[2] Stanford, Stanford University Press, 1939.

[3] San Marino, Huntington Library, 1941.

question of title insurance, and the tidelands problem—are treated far more briefly than is warranted by their importance. In general, however, the volume provides a good background for an understanding of land use problems in the state.

J. W. Caughey's *Gold Is the Cornerstone* is in a sense disappointing, because the treatment of the significance of the gold discoveries for the development of the state is far less detailed and complete than is suggested by the title. The book contains very little material not already easily available, but it does present a good and highly readable summary of the general picture of the gold discoveries and their immediate consequences for the state. Unfortunately, a third of the book is devoted to a description of the routes by which gold seekers reached the West Coast—a subject which is not very productive for an understanding of the development of the state. The effects of the mining developments upon population, industrial, and agricultural growth are noted, but only briefly, and in summary fashion. Likewise, technical aspects of mining and mine organization beyond the earliest period are scarcely touched upon, in contrast to the excellent analysis in Rodman W. Paul's *California Gold*.[4]

JOHN F. DUE

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[4] Cambridge, Harvard University Press, 1947.

Statistics and Econometrics

Historical Statistics of the United States, 1789-1945—A Supplement to the Statistical Abstract of the United States. Prepared by the Bureau of the Census with the cooperation of the Social Science Research Council. (Washington: Supt. Docs. 1949. Pp. viii, 363. $2.50.)

This new publication of the Bureau of the Census, hereinafter referred to for brevity as the Sourcebook, is submitted to members of the economics profession, especially economic historians, in partial fulfillment of a long-felt need for more readily accessible and more adequately described historical time-series. It will serve both as an aid to basic research and as a handy reference volume for analysts of current economic developments, teachers, students and others who frequently need historical statistics in their daily work. Everyone who has spent frustrating hours searching for an elusive figure, source, or adequate description of data will welcome the effort which has been expended to lighten this burden as well as that which, more importantly perhaps, is envisaged for the future.

Users of the present volume will note numerous shortcomings in coverage, description, and format. This has been anticipated by the editors, who state in the introduction that this edition is to be regarded as a working manuscript rather than a final product. "As such, it establishes a pattern and provides a preliminary selection of materials. Gaps and weaknesses are thereby disclosed and problems crystallized. On the basis of the experience thus gained, and the suggestions and criticisms of users of this edition, the process of revision will make possible a more useful future edition."

Coverage has been determined partly by the conception of purpose and partly by budgetary limitations. The basic premises for data selection as initially drafted (see Appendix II) contained a twofold statement of aim: (1) "To provide a convenient source of reference for technicians who need information outside their immediate field of specialization . . ."; (2) "To provide more intensive students with a summary guide to the more important time-series data available . . . and [with] the principal qualifications as to interrelationships of such series. Also, it should provide specific indications of the sources. . . ." To meet these criteria within the arbitrarily selected limit of 3000 series it was further held essential, so far as feasible, to confine the presentation of data to those for the continental United States as a whole; to present only annual or census-period data beginning no later than 1920 and covering at least 20 years; to include only series which are of major importance in each field, avoiding cross-classification and sub-classification; and to present absolute rather than derived or adjusted data. These standards were not intended to be, and have not been, rigidly adhered to. None the less, allowing for an appropriate amount of flexibility and for the compromise of initial ideals in the face of practical difficulties, they define the broad character of the volume and explain the omission of much detail.

Analysts of business fluctuations will find their need for monthly and quarterly statistics briefly recognized in Appendix I, which presents 30 such series selected by the National Bureau of Economic Research. The series were chosen, as no doubt they should have been, for their representativeness and are, for the most part, familiar and accessible. Their assemblage as a compact unit, together with careful descriptions and source references, is undoubtedly a service but this appendix must be regarded as a statistical aperitif, to whet the appetite, rather than a major contribution to the cause of business cycle analysis. Researchers in this field will, nevertheless, find the volume useful. Many of the 3000 annual series are available elsewhere in monthly or quarterly form, and the descriptive texts accompanying the annual data can be extremely useful as guides to sources and aids in interpretation. They would have been even more useful for this purpose if information concerning the existence and time-coverage of parallel monthly and quarterly data had been systematically provided.

Budgetary limitations confined selection of annual and census-period series primarily to data readily available in federal agencies and a few additional quarters. The Bureau of the Census was able to engage in little new research of its own, and the conditions of compilation made it impracticable to take full advantage of the research already performed by others. That this was so is unfortunate, but the decision to bring out the Sourcebook in immediately useful, though incomplete, form was undoubtedly wise. Some of the data included were already available in more detail in special-purpose publications, such as the *National Income Supplement* (Dept. of Commerce), *Agricultural Statistics* (Dept. of Agriculture), and *Banking and Monetary Statistics* (Federal Reserve). These have been extended or supplemented with data from less accessible sources.

The scope of the Sourcebook as it stands can best be pictured by comparing it with the Statistical Abstract, which it is designed to supplement. Whereas the 1948 edition of the Abstract contains 32 topical chapters, excluding appendices, the Sourcebook contains only 14. The subjects of four chapters in the Abstract have been omitted entirely—Crime, Climate, and Territorial Commerce presumably because of the low priority of their claims to space, and Social Security because of the recency of the data. Material in four other chapters has been covered only incidentally. References to scattered series appearing in the Abstract under Education, Communications, Military and Veteran Affairs, and Distribution will be found in the subject index of the Sourcebook but these topics have not been treated in any systematic way. Owing to greater consolidation, the subject coverage of the Sourcebook's 14 chapters is closely similar to that of the Abstract's other 24, but much of the latter's refinement of detail, especially regional and non-time-series data, has been sacrificed to gain historical depth.

The editors suggest that it would be desirable to include in a future edition additional selections of the less readily available series, more "lapsed" series, and series in additional but unnamed fields. Some of the omitted or sketchily treated topics mentioned above are promising candidates for future expansion of the subject coverage. Indeed, it is not immediately apparent why social security data were not included in the present edition by way of exception to the general time-coverage rule. The revised Department of Commerce series on National Income and Gross National Product have been included, for example, even though they run back only to 1929. Nor is it clear, in view of their relevance and ready availability, why the census figures on school attendance, some of which run back to 1870, and various series compiled by the Office of Education, were omitted. They would have fitted well into the chapter on Government.

On the credit side, one may record two instances of bringing inaccessible series within easy reach. One is in the chapter on Wealth and Income, which brings together from obscure sources several estimates of national wealth and its components, including the contemporary estimates of Blodgett for 1807 and earlier years. The descriptions of the data are adequate to warn the unwary interpreter and to guide the careful student along fruitful paths. The second noteworthy contribution is in the chapter on Balance of Payments and Foreign Trade. Here are reproduced in summary form the pioneering estimates of Bullock, Williams, and Tucker hitherto available only, to this reviewer's knowledge, in the scarce 1919 issues of the *Review of Economic Statistics*. Again the descriptions have been prepared with care. The assemblage of less well-known data from multifarious or scarce sources into compact tables has occurred in other cases too numerous to identify and is one of the Sourcebook's most useful contributions.

The descriptive notes comprise nearly a third of the volume's bulk (the plan called for a higher ratio of text) and are designed to be as important a contribution as the statistics. For the most part this aim has been achieved, in some cases with notable success. The quality is uneven, however. The Census

Bureau was unable, or did not attempt, to hold its cooperators—mostly other government agencies—to rigid standards. The result is a lack of consistency, precision, and clarity in the selection and treatment of information to aid users of the statistics. At a minimum, users should expect to find (1) a precise statement of source; (2) unambiguous definitions of terms; (3) an indication of reliability (which might be satisfied by a statement of the compiler's degree of confidence in the data but would ordinarily require elucidation of the basis on which estimates were prepared, of the nature of reporting systems for recorded data, and of homogeneity and other characteristics affecting interpretation); and (4) specific explanations of discontinuous changes in order of magnitude. Of these four requisites, only the first appears to have been fully satisfied.

To mention a few deficiencies, value figures for mineral production are frequently presented without indicating the degree to which the materials had been processed up to the point of valuation, which varies from case to case; also, it is not always clear whether production figures for smelters and refineries include or exclude imported materials. The utility of several series running back to the 18th and early 19th centuries has been diminished by limiting the description of the early data to a citation of source only. If it is worth devoting a thousand words to describing the vagaries of the statistics of gold production since 1792, one is certainly entitled to have his curiosity satisfied concerning the basis for early estimates of bituminous coal production, and of raw cotton production for the precensus period, 1792-1838; or to receive a hint concerning the manner in which figures for the assets and liabilities of Colonial and State banks, 1774-1833, were compiled. Nonspecialized users of medical school data will be grateful for textual comment concerning the dubious accuracy of pre-1900 figures and the reasons for certain sudden changes in magnitude. Users of other series may wish that this type of aid had been introduced more frequently.

The format of the Sourcebook undoubtedly received careful attention. But what was the reason for placing the entire descriptive text at the beginning of each chapter instead of having the general and specific notes precede the particular groups and tables to which they refer? The present arrangement is less convenient and conducive to careless disregard of essential commentary. The cross-reference system linking text and tables is, on the other hand, excellent.

A praiseworthy device of presentation is the Time-period Index, a convenient tabulation which permits one to locate quickly every series that stretches back to the 18th century, to the period 1800-1819, and so on to date. It was doubtless designed with the needs of economic historians in view. For the next edition, effort might be made to devise special purpose aids for other types of users. Series on prices, production, value, inventories, employment, wages, payrolls, productivity, etc. are scattered throughout the volume but the user of the subject index must refer to individual commodities or industries to determine what is available in each case. A ready reference guide to series of these common functional types would be especially helpful. Other special interests could be determined and catered to in a similar way.

In conclusion it is only fair to note that, although the Bureau of the Census carried the major financial and professional responsibility for producing the Sourcebook, it received assistance from a special committee of the Social Science Research Council and the Council's Committee on Research in Economic History. Initially, in 1945, the American Economic and Statistical Associations were jointly interested and established an investigatory committee at the instigation of Dr. Frederic Dewhurst, the originator of the idea. The interest of the two professional associations appears to have been transitory, possibly for lack of funds to carry the project through to a suitable conclusion. Whatever the reason, it may be hoped that the appearance of the Sourcebook will be made the occasion for a revival of the professional societies' interest. Many valuable brain-hours are wasted because of the horse-and-buggy techniques which still dominate the dissemination and processing of economic and other social statistics. Lack of resources will be a continuing problem unless businessmen and the Congress can be persuaded to transfer to the social sciences some of their high regard for research in the natural sciences. The professional societies, however, should not dodge their responsibility for improving both the standards of quality and the accessibility of statistics. A special committee or group, devoting itself intensively to this task, could scarcely fail to produce impressive results, especially in the field of nonstandardized monthly and quarterly series. Progress in measurement is not a sufficient condition for further rapid progress in the social sciences but it is a highly necessary and unnecessarily neglected one. The Sourcebook is a valuable step in the right direction. Its value will be still greater if those whom it is designed to serve are alive to the needs and potentialities which it suggests.

CHANDLER MORSE

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Economic Systems; Planning and Reform; Cooperation

Guideposts in Time of Change. By JOHN M. CLARK. (New York: Harper. 1949. Pp. x, 210. $3.00.)

Works of John Maurice Clark are "must" reading for those in search of guidance on basic social problems of our age. *Guideposts in Time of Change* is no exception. Here again we find the results of the rare combination of high technical competence, wide learning in many fields of social study, and wisdom which have placed Professor Clark in the first rank of social scientists. And, thanks to the author's pains with clear, nontechnical exposition, the book furnishes to policy makers, editors, and general readers a masterly treatment of fundamental problems that is both comprehensible and succinct.

The book consists of a series of lectures given at Amherst College on the Merrill Foundation in the winter of 1947-48. It is complementary to the author's Cook lectures at the University of Michigan published a year earlier under the title *Alternative to Serfdom.* It is not a rehash of the materials in the previous volume, although much of the discussion is in the same general area of problems of institutional change and balance between freedom and authority. Many subjects treated here were not discussed in the earlier

volume, and vice versa. The opening chapters on the totalitarian threat to free societies give to this volume a somewhat different orientation. The new book devotes more attention to the problem of economic instability, and also carries much farther the explorations into certain problems, such as the relation of wages to total employment and production. Even where there is some duplication with the earlier volume, this book contains new insights and reflections that will repay careful perusal.

The seven chapters of the book seem to fall into four parts, linked together but not closely articulated. The first two chapters diagnose the nature of the totalitarian threat and give a prescription for meeting it. Setting our own house in order is a first imperative. Accordingly, Chapter III is devoted to an examination and clarification of the objectives of a free society in the present age, with special reference to American values. Maintenance of adequate job opportunities being a critical problem, attention is given to the key factors—spending, prices, and wages—in three chapters that make up about half the book. Here the author formulates a theory of wages "which might afford a basis for an economically sound wage policy" for the guidance of union leaders, managements, mediators, and arbitrators. The last chapter, bearing the arresting title "Changing Balances: Uncommon Requirements for the Common Man," discusses the balance of motives and forces in collective bargaining and the chances of acceptance by business and labor leaders of social responsibility, including adoption of a code of principles of wage determination. It then treats balances between "planning" and freedom, self-interest and collective motives, and ideas and action in a democracy.

The book is packed with penetrating analysis, wise reflections, and challenging explorations. A reviewer can single out for comment only those things which seem to him of special importance or interest. Other readers would give a different emphasis, but none will fail to find in this book a great deal that is significant and interesting.

Clark considers the great danger to be totalitarianism as a threat to personal freedom and democracy, not economic collectivism as a threat to private enterprise. In his words,

> We in this country are properly defending, not private enterprise as it is and it is not now fully "private"—but the right to develop and modify it by evolutionary methods, or at least by free and democratic methods, into something we hope will be more sound and satisfactory than the particular stage which quasi-private enterprise has now reached, or, for that matter, any of the stages that have preceded it. All democratic forces are our nattural allies, including democratic socialists. Moscow has shown itself as much their enemy as ours (p. 6).

The author believes that totalitarianism will for some time be a grave threat to the continued existence of free societies, even apart from a shooting war which he does not regard as inevitable. An aggressive Russian nationalism, long frustrated, and a revolutionary gospel offering universal salvation to individuals through absorption in a great common purpose, are implemented with dictatorial command of great resources, a complete end-justifies-means "morality,"

and a formidable set of conspiratorial techniques. This diagnosis convinced Professor Clark two years ago that the Russian drive could not be contained short of an alliance for collective self-defense, with resistance by individual countries to any entering wedges of Soviet penetration, and adequate economic aid from the United States for rehabilitation of war-torn economies. He saw, however, that this would merely gain the free nations a breathing spell in which to tackle the difficult problem of reaching a basis of understanding with Russia. During this "breather," the free nations must put their own houses in order and work toward the development of institutions and altered attitudes necessary to world peace. Russia must be convinced that her own best policy is to live and let live with the free nations, because those nations are too strong to collapse or be captured and because their system is willing and able to live and let live with the Russian system.

Here we have a penetrating and judicious treatment of the totalitarian threat put in common-sense terms. The author's hope, expressed in the preface, that these thoughts would be commonplaces by the time they appeared in print has been realized, at least in considerable part, with respect to economic aid and the defensive alliance. Unfortunately, the same cannot be said with regard to the need for strengthening our democracy and our economic system by frankly recognizing defects and making improvements.

In Chapter III, Professor Clark presents, I think more clearly than before, his view of the basic problem of institutional development facing us in this transition era. The theme of history for many centuries has been, in his view, the quest for a balance between liberty and what he calls "a sense of belonging to something bigger than one's self and the psychological and material security that goes with this." In the four centuries from the beginnings of the Protestant Reformation to 1914 the dominant motif was liberty. For some centuries previously the authority and discipline of the Catholic Church had overshadowed the movement toward liberty. The nineteenth century brought an excess of individual liberty, going beyond a healthy balance. Totalitarianism is now punishing us by upsetting things in the opposite direction. We must find a better balance. And this must be fashioned in part with or out of values and institutions which we have to accept because American values are what they are, or because anything else would be administratively impracticable, or simply because they represent changes that are historically irreversible. Thus we must accept mass production and group power. We want the efficiencies of the former; and membership in labor unions or other groups fills an important psychological need of the individual, giving him the sense of belonging to something bigger than himself and security from exploitation. The following passages summarize the rest of the author's argument on this theme:

> What we have to evolve is a system that will be workable, starting with great corporate enterprises and labor unions, both possessing a great deal of power to protect themselves from competitive forces, and governmental agencies exercising increasing power over the outcome. . . .
>
> So the strategic fact of the inevitability of group power has led us to what seems the most basic economic principle of the present age and the visible future. It is that the amount of freedom we can keep is limited and measured

by the degree of responsibility with which economic power is exercised, and limitations upon it are voluntarily accepted. . . .

Irresponsible use of economic power leads either to chaos or coercion. As I have said elsewhere, a state cannot surrender to chaos, but it may lose its liberal character in combating it. So the objective is to establish ways of acting which may relieve our government from facing this hard alternative. . . .

The aim is that organized groups, of capital, or labor, should have powers that can and will be used for salutary reduction of insecurity, and that these should be supplemented by public action in the fields of social insurance and stabilization of employment, while the use of these powers to the twin ends of monopolistic exploitation and inflation should be kept to a minimum which the system can safely tolerate (pp. 62-63).

We Americans also choose evolutionary change as preferable to abrupt revolution. This means working by trial and error and not pushing change faster than the system can adapt itself. Our present choice to maintain a system that is predominantly one of private enterprise does not mean that we want to keep it just as it is, which is in any case impossible since change is endless. It means rather that "we choose to let change come in the evolutionary way." The author recognizes "genuine ground for the fear that the requirements of the modern world are inconsistent with those of a free society," but declares emphatically that if we want freedom we can maintain the essentials of it. This will require voluntary restraint and social responsibility in the exercise of economic power, and the mutual confidence that can come only from recognition by each group, and by the government, "that the other has a necessary job," and "understanding of what it needs in order to do the job." It will also require wise and effective leadership and the capacity of the people to respond to this. Much depends, too, on education, not only to give better knowledge of social problems and processes, but also to help in developing a better morality. On our chances of coming through the transition successfully the author's attitude seems to be one of restrained optimism, rather than despair or naïve faith.

The first of the three chapters on spending, prices, and wages is an excellent summary statement, clear and understandable by all, of what economists know about the problem of assuring sufficient, continuous spending to maintain full employment by one who has contributed much to our knowledge in this field. Remarking at the outset that great advances in our knowledge of how to deal with this problem have made it "hard to say anything both new and true," Clark does not here attempt to break much new ground, but presents instead a discriminating appraisal of the usefulness and workability of the principal fiscal and monetary tools hitherto discovered for dealing with the problem. Many may disagree with some individual judgments, *e.g.*, the conclusion that serious credit restrictions are likely to be postponed until their result will be to precipitate an impending recession rather than to check a boom before it goes to unhealthy lengths. But few who give hard thought to these matters will be in sweeping disagreement with Professor Clark's appraisals.

Believing that a well-behaved system of prices and wages is a necessary

supplement to the most efficacious fiscal and monetary instruments for promoting substained full employment, Clark devotes two chapters to the perplexing questions of what constitutes "good" and "bad " behavior of prices and wages.

In a short discussion of inflation, one conclusion is that there is probably no harm in a slow, upward drift of prices averaging not more than two per cent per year, combined with short fluctuations that obscure the trend. Treatment of problems of inflation, good as far as it goes, is disappointingly brief, especially since the institutional development of the present era stressed by the author may contain a pronounced inflationary bias. Evidently he considered the question of the effects of downward price flexibility in depression worth the greater part of the lecture period.

Reductions in general prices and in particular prices, price decreases with and without wage cuts, reductions in margins above direct costs, changing relations between prices of raw materials, factory prices, and consumer prices—all these are systematically examined from the standpoint of the effect on total employment and production. The author concludes that although the effects are important, we know little about them and "can learn comparatively little about them by traditional kinds of analysis, based on the law of supply and demand for single products." His analysis, which again constitutes a concise summary of the present state of knowledge (or lack of it) on this problem, indicates why economists, evidently including Clark himself, are increasingly skeptical of the effectiveness of price flexibility in stabilizing employment and production. This is not a counsel of complete despair, however. He holds that the effects of some sorts of price reductions in facilitating private and public arrangements for stabilizing high-level demand can be predicted well enough to justify their inclusion in a combined program. The price chapter does not develop many principles of "good" price behavior but it will be valuable in keeping us on the right track and in avoiding fallacious proposals.

In the chapter on collective bargaining and wages, on the other hand, Professor Clark's principal concern is to formulate a set of principles of economically sound wage adjustments, following out explorations begun in *Alternative to Serfdom* and ideas suggested by Slichter, Dunlop, and others. Analysis of the question of economic limits on the level of wages leads him to these conclusions: (1) There is a *prima facie* case for maintenance of wages as a relatively stable proportion of national income. (2) Extreme increases or decreases in the general level of real wages would tend to reduce employment, but there is a wide range between these extremes where the outcome is uncertain. Clark suggests as possible examples of the limits an increase of wages that would cut profits in half and a reduction of wages by one-third. (3) Within the range of uncertain effects, the tendency to give the benefit of the doubt to higher wages is sound. There may be no automatic corrective for wages that are a little too low, whereas industry can generally raise prices if wages go a little too high. Here the author refers to his previous conclusion that an increase in prices averaging not more than two per cent per year is not serious. But, he warns, it is not safe to resolve all disputes in favor of higher wages,

and we badly need to gain better understanding of this problem. (4) That wages tend to rise into the zone where further increase (above the increase in productivity) means reduced employment is strongly suggested by the apparent fact that union organization and politics are geared to an annual increase in wages larger than the annual increase in productivity in the system as a whole. (5) At present, economic factors play a small part in wage adjustments and "their relation to standards of economic correctness is tenuous and doubtful."

The above points both indicate the need for formulation and use of a set of economically sound principles of wage adjustments and lead to the following principles which the author sets out: (1) The average of wages in the whole economy should increase at the same rate as the average of productivity increase. (2) Consideration should be given to the question whether current profits in the industry and in the economy as a whole are more or less than customary and whether they constitute a fair and adequate share. (3) Wage rates in the various industries should rise over a period of years approximately as much as the average increase in man-hour productivity in the whole economy, so as to maintain related rates for related types of work, with larger increases only to correct inequities between trades and industries. Prices should decline in industries where the gain in productivity has been greater than average and should rise in those where it has been less than average, except in declining industries where demand will not support price increases. (4) Temporary wage premiums to attract labor to an expanding industry or to share extraordinary productivity gains should not exceed an amount that the average gain in productivity can make up in a few years.

In the last chapter, Professor Clark examines the attitudes of management and labor and concludes that they are likely to become increasingly hospitable to the development of agreed codes for wage determination and other matters.

The author's analysis in developing his proposed code of wages will suggest many questions to economists and others. For example, is maintenance of the past proportionate division between wages and profits necessary in order to encourage sufficient capital investment for full employment? Or does maintenance of full employment require larger proportionate consumption than in the past, and hence lower profits and a higher wage and salary income? The author seems to waver between these views. Again, what sort of criteria of fair profits would command general agreement and be economically sound? As a final example, can the economy function well if wages and prices are settled more or less separately? Clark is silent on the question whether collective bargaining should or should not in any way touch prices.

Those who have struggled with questions of the sort taken up in these lectures will, however, regard this book as a notable step forward. And those who believe with the author that our mixed society can operate well only with voluntary acceptance and discharge of a considerable measure of social responsibility by unions, businesses, associations, and other groups with economic power will hope that Professor Clark's progress from the *Social Control of Business* through *Guideposts in Time of Change* will stimulate many others to work intensively on the crucial and challenging problems of developing codes

of principle, not only for wages but for price and profit policies and investment and inventory policies. More economists should turn attention to this "empty box," which is one of the emptiest and most important. Work of two kinds is required: that which brings advances in our technical knowledge and that which translates what we do know into practical codes. There is need and opportunity here for a variety of capacities and skills that will supplement and stimulate each other. To urge acceptance of social responsibility by power groups is fruitless and footless unless principles for its exercise are being developed.

DONALD H. WALLACE

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Freedom and the Administrative State. By JOSEPH ROSENFARB. (New York and London: Harper. 1948. Pp. xiii, 274. $4.00.)

Mr. Rosenfarb maintains "that a planned economy is inevitable in the light of the historical evolution of social forces, but that we do possess a collective choice whether to make the administrative state dictatorial or free and democratic" (p. 231). His book, therefore, is opposed to the prevailing trend of economic thinking which, under the adverse impression left by shortcomings in the war and postwar economies, identifies economic planning not merely with waste but also with despotism. The present reviewer, regarding himself as a member of the same opposition, appreciates the timeliness of a book that takes issue with the contentions of the anti-planners. But in spite of a wealth of historical and sociological material, which Mr. Rosenfarb uses with deep understanding to buttress his arguments, his book is not likely to convince the unconvinced.

The reason for this poor prospect of success in argumentation is the direction of Mr. Rosenfarb's main interests, which are not those of an economist. He is a lawyer with rich administrative experience, and a student of history and sociology. Such a background is very valuable in dealing with the problems of planning, but the primary approach to them ought to be from the angle of economics, because a clear view of the functions to be fulfilled must precede the designing of governmental machinery for their fulfillment. We are still struggling with the issue of how to fit the price mechanism into a planned economy. Therefore, we do not yet see with all the desirable clarity how far a planning government, in its efforts to carry out the plan, can rely upon the initiative of the individuals (after having set the data to which individuals will react) and where a more direct exercise of regulatory powers will be needed. Because Mr. Rosenfarb's book does not bring any progress in this direction and gives only an inadequate picture of the results already achieved in the economist's controversy on planning, his very intelligent discussion of organisational and functional problems of government will still be met by the critics with the question: Are the democratic procedures which the author recommends really compatible with the nature of economic planning? To be sure no detailed blueprint of the economics of a planned system can be drawn up in advance, and insistence on an impossible degree of precision in the "plan for planning" is a favorite but illegitimate weapon of the

anti-planners. But to blunt this weapon, the proposed economic system should be pictured as lucidly as it is possible at this stage of the debate, and all considerations of political methods should be integrated into that picture.

Closely connected with the prevalence of political and sociological interests is a fault of the book which is at the same time the cause of one of its merits: Mr. Rosenfarb is trying to do too much on a very limited number of pages. His subjects range from the advantages of the British as compared with the American form of democracy to the rôle of the family in primordial society and to the intricacies of the Taft-Hartley Act. This broad approach prevents the author from concentrating the force of his reasoning on the decisive points but also makes his book very stimulating for anyone interested in the interrelationships of sociology, political science and economics.

CARL LANDAUER

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Business Fluctuations; Prices

Fluctuations in Income and Employment. By THOMAS WILSON. 3d ed. (New York and London: Pitman. 1948. Pp. x, 216. $4.00.)

Business cycles are the focus of two related issues of method in economics: verbal versus mathematical expositions of theory and historical versus econometric techniques of empirical investigation. Mr. Wilson's book is divided equally between a review and synthesis of modern business cycle theory and a study of cyclical fluctuations in the United States from 1918 to 1937. His theoretical inquiry, Part I, is verbal rather than mathematical. His empirical study, Part II, is, in his words, "of a direct nature" and avoids "involved" econometric techniques. Mr. Wilson is, quite properly, too much interested in his subject matter to offer any extended defense of his methods; and he neither excludes other techniques nor claims finality for his conclusions. But since he uses the tools of his choice with the greatest skill, his book illustrates well both the merits and the limitations of non-mathematical techniques. The advantages, which Mr. Wilson exploits to the full, are flexibility and inclusiveness in the explanation of historical events. The limitations, which even Mr. Wilson cannot escape, are the difficulties of tracing merely by inspection the chains of causation in a complex system.

The theoretical half of the book should be a valuable text for students of business cycle theory. It begins with a clear and balanced summary of the "classical"—"Keynesian" debate concerning effective demand. The exposition of the theory of interest rates is particularly helpful. The author brings equal illumination to the disputes surrounding the relation between consumption and the demand for investment goods. The high point of the three chapters on this subject is a brilliant refutation of the paradoxical conclusions Professor Hayek draws from the "Ricardo effect." After an inconclusive discussion of the effects of changes in money wages and a skeptical evaluation of the importance of monetary forces, Mr. Wilson presents his own synthesis of trade cycle theory.

The core of his theory is an accelerator-multiplier model of the cycle. Mr. Wilson is seeking a model with a self-generating cycle, but it is by no means

clear from the relationships he postulates that his model will reverse its direction. Because he avoids an exact formulation, he is not led to specify the lags or non-linearities required to produce cycles from an accelerator-multiplier system. Moreover, since Mr. Wilson relies heavily on the acceleration principle throughout the book, it is unfortunate that he perpetuates the error of relating investment demand to changes in the output of consumption goods alone; after all, the production of investment goods also requires investment goods. Defects in Mr. Wilson's theoretical model are not serious because the eclecticism of his approach permits him to depart from it freely. A large proportion of investment he attributes not to current changes in output but to technical progress. And for both turning-points, he lists ten alternative hypotheses.

Part II is an excellent brief history of United States business fluctuations between the wars. The author has an enviable prose style, and he is a master of the difficult art of making statistical material readable. Possibly because he views American trade cycles from overseas, Mr. Wilson is able to appraise government economic policy with a detachment and balance of which few American economists are capable. He does not find it necessary to blame the disappointing recovery of the 'thirties either on the New Deal or on secular stagnation.

Part II is more than good economic history. Mr. Wilson has attempted to employ the theory of his Part I to explain the economic fluctuations of the period and to confront competing theoretical hypotheses with the facts. Each phase of each cycle—especially each turning point—is examined to determine the consistency of various theories with observed data. In addition, Mr. Wilson undertakes to explain differences between cycles; for example, why was the recession of 1923 short-lived and that of 1929 prolonged?

This empirical study complements but is no substitute for econometric investigation. Mr. Wilson is able to weed out many theories as inapplicable to a given period by showing that they are obviously inconsistent with observed time series. But he is usually left with an embarrassing number of possible hypotheses. Lacking any quantitative estimates of the structural relationships of the system, he cannot evaluate the relative importance of these hypotheses. For example, when income and consumption both decline, Mr. Wilson cannot tell whether the fall in consumption was induced by the decline in income or was an autonomous contributor to the change in income. On the other hand, Mr. Wilson is better able than an econometrician to exploit information which is not easily quantified: *e.g.*, the state of confidence, political events, occurrences in particular industries.

The final two chapters—the concluding one added in this edition—contain Mr. Wilson's ventures into policy recommendation and prophecy. As a prophet, Mr. Wilson so far deserves honor. In the first edition in 1941, he did not succumb to the fashionable pessimism concerning postwar economic prospects. Neither does he predict secular inflation now. Whether or not they agree, readers of this book will appreciate the perspective of Mr. Wilson's outlook.

JAMES TOBIN

Harvard University

Money and Banking: Short-Term Credit; Consumer Finance

The Veil of Money. By A. C. Pigou. (London: MacMillan. 1949. Pp. viii, 150. $2.50.)

Professor Pigou in his latest book attempts to throw some new light on the old question of the significance of money in determining income and employment. Part I is devoted to a general discussion of the institution of money with special reference to the pricing mechanism and inflation. Part II, under the title, "Money Income," contains the substance of the book—a model designed to demonstrate the predominant factors determining the magnitude of money income.

Economists generally have regarded the problem so complicated as to necessitate simplifying assumptions. The most significant of the simplifying assumptions on Pigou's part is his abstraction from changing expectations. ". . . I shall leave out of account the fact that the several governing factors . . . are, on occasions, expected to be different in the future from what they are now" (pp. 65, 66). Next the predominant real factors influencing the magnitude of total money income are set off against the purely monetary factors. The real factors include the demand and supply of investment goods, labor efficiency and industry's monopoly power. Monetary factors, on the other hand, are conceived of as comprising the stock of money and its velocity in relationship to the rate of interest and the level of money wage rates.

The income velocity of money (or, in another sense, the real balances that people wish to hold) is determined in part by the transactions, precautionary and speculative attitudes of holders of cash, as also by the availability of "near" money. Velocity is an increasing function of the rate of interest (r) and a decreasing function of the portion of purchasing power accruing to non-wage earners, and the size of real income. The stock of money in circulation on the other hand, tends, via central banking policies, to be an increasing function of r and the purchasing power available to non-wage earners.

The demand curve for new real investment is a decreasing function only of r, while the supply of real savings is an increasing function of r, the size of real income and the proportion of purchasing power held by non-wage earners.

With these relationships established, Pigou's model is set to work. Although there are many refinements and modifications in his text, his main theme may be summarized briefly here. An increase in the demand for investment goods increases r, the argument proceeds, and thus increases both the velocity and the stock of money in circulation. This generally entails a higher wages bill; and, if money wages are constant, higher employment and higher real income result. If the income of non-wage earners increases, however, real savings increase, thus reducing r and, in turn, money income. This latter consideration minimizes the force of the initial impulse leading to a higher money income. Again, if an increase in investment activity does produce a higher real income, the resulting expansion of real savings would impose another limit upon the increase in money income.

On the basis of Pigou's formal model, an *increase* in money wages necessarily reduces employment and real income (p. 106). But when Pigou turns

to changes in money income not the product of money wage changes, his conclusions are quite different: *Stability* of money wages serve then only to exaggerate the cycles of employment (p. 118). But two forces may be employed to mitigate this latter form of employment instability, the control of wages and the regulation of the stock of money in circulation. This then is perhaps the basic conclusion of the work: that instability cannot be avoided save by the deliberate adoption of flexible wage policies and the judicious control of the money supply.

Attention should be directed to Pigou's unusual definition of inflation, a situation in which "money income is expanding relatively to the output of work—not the output of goods and services (real income) . . ." (p. 14). This effort to emancipate the concept of inflation from considerations of productivity seems intended to concentrate attention on the special interest of the writer, the level of employment. The further assertion that money "does not compromise any of the essentials of economic life" (p. 25) should also be interpreted in the light of this same special purpose. Even though Pigou points out that "the raiment (money) greatly affects the comfort of the body," one might well wonder if the structure of modern capitalism, at least in its free form, could long survive without it. But Pigou seems impressed with the necessity of giving adequate weight to the real factors that operate beneath the money surface, even though in his own model he points out that money is, indeed, much more than a veil.

The abstraction from expectations greatly weakens the applicability of Professor Pigou's conclusions to the economic world in which we live. For the most part Professor Pigou is content with an analysis of the *shape* of his functional relationships, but their quantitative importance, *viz.*, their *position*, in his own words, depends in large part on expectations. But perhaps Professor Pigou feels that it is better to offer modest conclusions on the basis of astronomy—working with more dependable variables—than to face the more spectacular issues of public policy on the basis of astrology—working with the erratic and often imponderable elements of expectations.

PAUL E. SULTAN

Cornell University

Money and Banking. By JAY L. O'HARA. (New York and London: Pitman. 1948. Pp. xx, 671. $4.75.)

This textbook is written for the beginning student in money and banking. The exposition is clear, free from excessive factual detail, expressed in simple language. At the end of each chapter is a summary of contents, a set of questions, and suggestions for further reading. The student should not find this presentation difficult to understand. As an introduction to money and banking this book should prove to be a welcome addition to the texts on this subject.

A short historical, descriptive, and theoretical treatment of money is followed by a more extended discussion of banking. Major emphasis is placed on the commercial banking system since it is considered ". . . the source of

virtually all of our supply of effective money" (Preface, p. vii). The utilization of considerable space to describe noncommercial banking is justified on the ground that commercial banking "... can be fully understood only as noncommercial banking functions are studied in some detail" (Preface, p. viii). A condensed history of banking in the United States is presented as a background for a better understanding of contemporary banking.

The objectives of monetary policy are briefly considered at the end of a chapter dealing with stabilization of the price level by means of the gold standard, bimetallism, credit control, one hundred per cent money, and other methods. Although emphasis throughout the book is on the value of money, stabilization of the price level is subordinated to maintenance of full employment. The "... achievement and maintenance of full employment should ... occupy a position of primacy as the objective of monetary policy" (p. 492).

As one means of realizing high level employment, "moderate increases in the general level of prices ..." are advocated (p. 493). This recommendation is based on the argument that businessmen anticipating greater profits as a result of price increases will be stimulated to expand employment and production. In the analysis no distinction is made between competitive and monopolistic conditions. The possibility that rising prices will cut down the physical volume of sales of goods in the market and thus destroy opportunities for employment is not considered.

A serious weakness of the book is the failure to give more consideration to Federal Reserve policy. Only occasional references are made to the System's past experience in realizing (or failing to realize) its objectives through the use of credit controls. The treatment of the Federal Reserve System is for the most part descriptive and mechanistic, consisting of a description of the structural organization of the System, an exposition of Federal Reserve Bank functions, and the mechanics of credit controls.

In the chapter on Keynesian economics the following policy is recommended. "The principal social responsibility of those in control of the supply of effective money is so to manage that supply as to keep rates of interest sufficiently below the marginal efficiency of capital to insure a rate of investment that will provide full employment. At the same time, interest rates must be prevented from falling to a level so low that savers prefer to hold their wealth in money form rather than offer it for productive employment" (p. 466). Precisely how to choose and set rates of interest that will harmonize with the above requirements is not revealed. The presumption is that, if proper rates of interest are not (or cannot be) established, the effects will be evident in "... declines in effective demand, output, employment, and money income, that result from the low level of investment when private entrepreneurs refrain from putting to work all of the funds that are being saved" (p. 464). The solution to this problem is "... simply that what the private sector of the economy fails or refuses to do must be done by the public sector.... it is necessary for the government to step in and borrow the otherwise idle hoards of savings. ... The funds that they (*i.e.*, government) borrow and spend *will* find their way into the markets in effectuating a higher level of aggregate demand ...," employment, and income (pp. 464-65).

The chapters on foreign exchange discuss the functions of banks in financing foreign trade, determination of foreign exchange rates under both gold and paper standards, foreign exhange practices growing out of depression and war, development of international monetary cooperation, establishment and operation of the Bretton Woods institutions, and American financial aid to foreign countries.

In the analysis of the determination of the value of money the transactions and cash-balance equations discussed under the title of "conventional approaches " are found to supplement one another. The Keynesian analysis is isolated for special treatment in a separate chapter under the title of "income approach." Keynesian theory seems to be utilized primarily to explain the determination of the value of money and incidentally to explain changes in the level of employment and the national income.

A variety of contemporary problems is considered in the final chapter. The methods and effects of war finance, postwar inflation, postwar effectiveness of the traditional methods of credit control by the Federal Reserve System, stabilization of the economy through a combination of monetary and fiscal policy are discussed very briefly.

RAYMOND H. LOUNSBURY

Dartmouth College

Volkswirtschaftliche Theorie der Liquiditaet. By OTTO VEIT. (Frankfurt M.: Vittorio Klostermann. 1948. Pp. 167.)

This book is not only a valuable indication of the present state of monetary theory in Germany, but it is also a major contribution to the field. The author, a professor of economics at the University of Frankfurt, is also president of the Land Central Bank of Hesse, and as such also a member of the board of directors of the Bank deutscher Laender.

The purpose of the study is to clarify a series of economic problems by fitting them into a framework organized around the concept of liquidity. Liquidity is defined as "die durch Tauschgueter repraesentierte Verfuegungsmacht ueber Bedarfsgueter" (p. 12). Every commodity has some liquidity characteristics; to the extent that they predominate, the commodity is a "Tauschgut." It follows that the demand for liquidity need not be related in any definite way to the demand for money. For ordinarily money is merely at one extreme of the spectrum: it is the only commodity which is always and exclusively "Tauschgut" and never "Bedarfsgut"; goods in process of production are frequently at the other extreme. Both the level of liquidity and the degree of liquidity of commodities depend on such factors as the organization of the economy, customs and habits, the level of income (the proportion of savings is uncritically assumed to increase as national income increases [p. 27]), and the stage of the business cycle.

The purpose of liquidity is the acquisition of "Bedarfsgueter" by exchanging them for "Tauschgueter" (p. 14). The desire for liquidity is, in turn, explained in terms of the motives listed by Keynes in his explanation of liquidity preference. (The author states in his introduction that due to war and postwar conditions, more recent foreign literature was sometimes not

available to him.) The desire for liquidity as an end in itself is considered strangely as being pathological (pp. 16, 137), even though fear of the future and the desire for independence—which are hardly pathological—are given as reasons. Such a desire, if made effective, is supposed to block the circular flow of the economy; perhaps it is this result which is considered pathological.

The above concepts are then applied to various monetary problems. The control of money provides the possibility for the creation and distribution of liquidity. Money is treated as a veil which hides the basic characteristic of the concept of liquidity, but does not alter it. Interest is the price which regulates the market for liquidity: it keeps the supply of and demand for liquidity in equilibrium. Interest is created by renouncing consumption in favour of liquidity, and at the same time renouncing a high degree of liquidity; the lower the degree of liquidity, the higher the interest rate. Interest is thus the reward for non-spending *and* for its investment in relatively illiquid form (not-hoarding). The author sometimes comes dangerously close to regarding willingness not to spend nor to hoard as sufficient (p. 99); but such willingness is sufficient only in the presence of adequate demand for liquidity. In fact, the requirement of demand is somewhat neglected throughout. For example, the discussion of inflation and deflation (p. 54) is not very helpful in the absence of specified income assumptions. Similarly, the statement that demand for and supply of liquidity must be in equilibrium in order for the economy to be in equilibrium is not very useful without an analysis of the kind of equilibrium and the interrelationships between the latter and liquidity.

In the final chapter the apparatus is applied to some problems of international trade. It is shown how the "automatic" gold standard might present an ideal possibility of equalizing liquidity between nations, given the necessary assumptions and provided the rules of the games are adhered to by the participants. It is also indicated how institutions like the International Monetary Fund could fulfill a similar function.

Though a short review can hardly do justice to the stimulating analysis, it is hoped that it has at least whetted appetites.

HANS A. ADLER

Harvard University

Business Finance; Investments and Security Markets; Insurance

Government Financing of Private Enterprise. By DOUGLAS R. FULLER. (Stanford: Stanford University Press. 1949. Pp. viii, 206, $3.00.)

This is a study of the financing problems of business, particularly small business, and the government's rôle in resolving them. Although readable and informative, it is repetitious, contains considerable background material not directly related to the main topic, and suffers from a few organizational and structural weaknesses.

Since the case for government financial assistance to business rests largely

on the assumption that there are significant gaps in the existing private credit mechanism, Dr. Fuller begins his study with a brief examination of this premise, followed by three chapters of historical background information, domestic and foreign. The remainder of the volume is largely devoted to an analysis of government credit assistance to business since 1934, particularly through the Federal Reserve banks, Reconstruction Finance Corporation, and the wartime V-loan program, for the purpose of determining the need for continuation of such programs or the development of new programs.

The volume of business lending by the Federal Reserve banks approximated that of RFC during the years 1934-1937, but after liberalization of the RFC Act in 1938, RFC became the dominant government agency in this field. The most impressive fact concerning prewar experience under these two programs, according to Dr. Fuller, is the small volume of loans. He rules out application of unduly onerous terms and conditions by the administering agencies as a possible explanation for this, since "no trustworthy evidence has been introduced to prove that the standards applied were appreciably stricter than was necessary to conform with the instructions of Congress that loans were only to be made when reasonable assurance of repayment existed." The explanation is found instead in a lack of unsatisfied demand for medium-term credit principally because of the growing willingness of private lending institutions to extend term credit. Heavy postwar lending by RFC under its Blanket Participation Program (instituted in 1945 and terminated in 1947) arose both because of increased demand, especially to finance fixed-asset expenditures, and because RFC's participation terms proved attractive to private bankers.

The discussion of wartime government financial assistance, particularly the V-loan program, is clearly the most authoritative section of the book, reflecting careful study and familiarity with operating details gained by the author through first-hand experience. Several points commonly suspected concerning this program are confirmed, particularly the high average guaranty percentage (90 per cent being the most common), which generally showed little correlation to the strength of the loan, and the greater liberality of the War Department than the Navy Department or the Maritime Commission on eligibility, amounts, and maturities.

Particular significance is attached to the V-loan program, not only for its important contribution to increased production but also because the experience which private bankers gained under this program contributed to their willingness and competence to meet present-day needs. Important in this regard were stress on ability rather than collateral, experience in budgeting loan requirements and repayments, and emphasis on the importance to smaller borrowers of adequate technical assistance and accounting procedures. At the same time, the author recognizes the threat to private banking in the new respectability of a government guaranty, but he feels that reckless use of such guaranties can be prevented by requiring substantial private-bank participation.

The author's major conclusions and recommendations are as follows:

1. Little has been done, either by government or private agencies, to remedy

the serious gap in availability of equity and long-term loan capital for small business. However, he regards government provision of risk capital incompatible with free enterprise, and commercial-bank investment in such capital incompatible with the demand nature of their liabilities. His proposed remedies for this gap accordingly include revisions in the tax structure to revive former major sources of such capital, and creation of new private local financing institutions.

2. Although government experience prior to 1945 indicates no serious gap in medium-term financing, the large volume of RFC loans of this type since that time suggests the existence of a gap of minor proportions. (This gap may be more significant than Dr. Fuller concedes, as indicated by the sharp increase in RFC lending during the past year.) To assure adequate medium-term financing, he recommends continuation of RFC (but not Federal Reserve) authority, both as a competitive spur to private lending institutions and for standby purposes.

3. With respect to short-term credit, government experience provides "convincing evidence" that no significant gap exists.

4. Finally, he recommends two collateral government aids to small business investment: Exploration of methods for reducing costs of financing and provision of increased technological and advisory services.

The almost simultaneous appearance of this volume and A. D. H. Kaplan's study of *Small Business: Its Place and Problems* is a reminder that facilities for coordination of economic research may still be inadequate. On the financing issue, both volumes cover much of the same ground and arrive at many similar conclusions and recommendations. The Fuller volume, however, in most respects is more comprehensive and fills a long-felt need for an examination of the necessary rôle of government in business financing. But there are numerous additional problems in this general area which might have been studied with the same investment of time and resources had this overlap been avoided, including a detailed examination of standards employed in government lending programs.

JAMES B. ECKERT

Washington, D.C.

Business Finance. By CARL A. DAUTEN. (New York: Prentice-Hall. 1948. Pp. xiii, 551. $4.75.)

This book treats the same general topics as are treated in an ordinary finance text but it differs from typical texts in that it places the greater emphasis upon those aspects of finance which are of most concern to small business enterprises. Within this field much more attention is given to the financing of current operations and less to the raising of initial fixed capital than is customary. This statement does not imply that Dauten neglects the latter subjects but only that he devotes a greater amount of space to discussing problems that confront business enterprises continuously than to those which need to be solved but infrequently.

Teachers of conventional corporation finance courses will probably find

the book most useful to students as supplementary reading on sources of short-term capital. For example, an entire chapter is devoted to methods and procedures for obtaining current funds from banks, another to describing term loans, and a third to R.F.C. loans. Often the treatment is detailed, even to the extent of presenting an exhibition of forms and a list of addresses, (for example, two pages are used to list the addresses of the thirty-one R.F.C. agency offices).

The volume incorporates and makes copious use of much recently published material dealing with the problems of small business. Among other things it contains brief summaries of many of the pamphlets published by the U.S. Department of Commerce, and repeats the findings of the T.N.E.C. investigations. The author draws heavily on the writings of Neil Jacoby, Raymond Saulnier, Tynan Smith, Charles Schmidt, and other recent writers who have treated special financing procedures and problems.

Business Finance is not suitable for use as a text in corporation finance, largely because of its almost exclusive concern with small enterprise but also because the treatment is rather elementary for college level use. It is the kind of book which one about to start a small business should read and keep accessible. Within the scope of its objective—an explanation of the principles and methods of finance applicable to small business enterprises—the author has done an excellent job and has supplied a book that fills a gap in existing literature.

WILFORD J. EITEMAN

University of Michigan

Surety Rate-making—A Study of the Economics of Suretyship. By JULES BACKMAN. (New York: Surety Association of America. 1948. Pp. xix, 492.)

This book was prepared by Dr. Backman under the sponsorship of The Surety Association of America, an association of stock companies writing almost three-fourths of the fidelity and surety bond business. Dr. Backman was given full control of the study and, judging by the evidence within the report, he has produced an unbiased, objective analysis.

While the book is of greatest concern to those specializing in suretyship and insurance, it is of interest to economists as a study in pricing in a field where price determination is attended by unusual difficulties and where governmental regulation is assuming a more important rôle. Although it is difficult to omit any sections of the study, the economist, as compared with the insurance specialist, will find most valuable, Chapters 4, 8, 11, 12 and 14 on "The Rating Bureau and Competition," "Cyclical Aspects of Suretyship," "Principles and Mechanics of Insurance Rate-making," "Surety Rate-making," and "Surety Rate-making: Recommendations." In these chapters are included the author's principles and theories of pricing. A good case is made for regulated cooperation rather than free competition in surety rate-making. In other chapters, the author provides the background for the study and develops and analyzes the statistics on which his conclusions rest.

A wealth of statistics in the field of suretyship is presented in the book. These will be of greater value to the insurance and suretyship specialist than to the economist. Some had been published previously in scattered sources, but many are available here for the first time. Some of these are the heretofore unpublished results of studies made by surety companies for their own information; some are the results of special inquiries and analyses of their experience made by several companies purely for this study. Throughout the work, the sad lack of uniform, detailed statistics in the industry is evident. Dr. Backman has been forced to use data which, having been compiled on varying bases by different companies, is of questionable comparability. Suggestions are made to improve the statistics to be gathered in the future. In the area of expense statistics, improvement no doubt will result from the uniform accounting regulation of New York under which companies now are operating, but only since January 1, 1949.

One point which the author makes in a number of places (to cite just a few, pages 9, 291, and 314) is that, "surety bond prices are among the few prices which are now the same or *lower than* before the war." Further, "a price decline in such a sea of inflation is an achievement worthy of note." This emphasis seems unwarranted and incorrect. True, rates have been reduced. True, expenses as contrasted with losses consume a larger proportion of the premium dollar than in most insurance lines. But, exposures have increased so that larger amounts of coverage are required for the same protection. Whether prices, as distinct from rates, have actually decreased or not, depends upon the relationship between the decline in rates and the amount of coverage now required for the same protection as heretofore. In any event, the decline in surety bond prices is not as great as may be inferred without this qualification. Furthermore, it is not a very remarkable achievement, since, as the author points out elsewhere, the postwar period has been one of very low loss ratios and very high underwriting gains, even though the companies have been operating at the lower rate level.

There are two possibilities in the surety rate-making problem which do not seem to have been adequately explored. One, not even given passing mention in the book, is the possibility of charging a policy fee to cover fixed expenses, since the expense factor is predominant and heavy expenses in many bonds are unrelated to the bond penalties, and a premium to cover the hazard and variable expense element. The other is the possibility of applying a "pure premium" technique, similar to that of workmen's compensation. This is a possibility if measures of exposure can be determined for each type of bond. For many such, measures can be determined and for these at least the method would be applicable. The fact that very long term experience must be used does not preclude this method. The fact that there are many classifications with very small volumes of experience has not proved an insurmountable handicap in workmen's compensation insurance.

C. M. KAHLER

University of Pennsylvania

Public Finance

Current Financial Problems and the City of London. Published for The Institute of Bankers by Europa Publications Limited. (London: 39 Bedford Square, W. C. 1. 1949. Pp. 219. 15*s.*)

The series of thirteen papers contained in this volume were originally presented as lectures at the International Summer School of the Institute of Bankers, held at Oxford, England, in September 1948. With few exceptions, the authors are financial journalists, among them several of the leading editors of, and contributors to, Britain's renowned financial press, including the well-known editor of *The Banker*, Mr. W. T. C. King. There are also papers by Roy Harrod, R. S. Sayers, and Sir Henry Clay, to mention some of the professional economists who were invited to lecture at the school.

While this symposium is addressed primarily to the student of London's financial mechanism and the institutional structure of British banking, several studies contain comments of more general interest to American economists. This is particularly true of the paper by W. F. Crick, general manager for research and statistics of the Midland Bank, whose skillful exposition of the rôle of monetary policy in postwar Britain contains much of relevance to other "mixed" economies in Europe. Nobody will be surprised when Mr. Crick visualizes monetary policy as playing a relatively small part among other factors in the shaping of a comprehensive economic policy in Britian. Yet Mr. Crick very properly points up the fact that monetary policy and its twin brother, budgetary policy, can together still be of large importance in a semi-controlled economy, depending upon whether they are in harmony or conflict with the trend of physical controls.

Roy Harrod, in a paper entitled "The Financial Position of Britain and the Balance of Payments," comes forward with a number of suggestions that run counter to generally accepted doctrines. There is now wide agreement both in this country and in Europe that Britain's salvation, no less than that of Western Europe as a whole, lies in a substantial expansion of its plant and equipment. Mr. Harrod, however, is worried over the current rate of capital investment in Britain. The country's steel program, he observes glumly, is grossly excessive, and according to his gloomy forebodings the mechanization of the coal mining industry will lead to acute unemployment before many years have elapsed. He reiterates his familiar thesis that the roots of Britain's balance of payments difficulties lie essentially in excessive capital outlay and that investment expenditures should be cut sharply. American observers, alive to the urgent need for modernizing and expanding much of Britain's industrial plant if that country is ever to achieve financial equilibrium, will find it difficult to accept this line of reasoning, from a longer-run point of view at least, though they may readily agree with Mr. Harrod's counsel that certain investments could well be postponed until Britain's general position has eased.

Professor R. S. Sayers, in his brief lecture entitled "Some General Aspects of Central Banking," calls attention to some worthwhile fields of action that central banks could cultivate with advantage to themselves and

their economies. It is the function of central banks, Professor Sayers maintains, to seek out the sensitive spots in their economies and be ready to adopt novel weapons to deal with them. Professor Sayers enters controversial ground when he argues that central banks, having close contact with all parts of the financial system, are institutionally better adapted than Treasuries for the actual exercise of control. But one may readily agree with Professor Sayers' suggestion that central banks, if they wish to be as useful as possible, must not be unduly conservative but must develop new techniques to meet new situations. These are doctrines that have successfully been put into practice in recent years by the authors of central bank statutes in various parts of the world.

Sir Henry Clay's valuable appraisal of the evolution of the sterling area reaches the conclusion that Britain derives great advantage from its relations with the rest of the sterling area and that it would be folly to adopt any policy that aims at breaking it up. Now that much respectable opinion looks at the sterling transferable-account system as one of the principal devices for creating a new intra-European payments mechanism, many a reader may well have expected a somewhat more positive approach toward the future of sterling in international, and particularly, European trade.

In many circles, it has lately become fashionable to speak of the Bretton Woods "twins" in a deprecatory tone. Mr. Paul Bareau, deputy city editor of the *News Chronicle* and frequent contributor to financial magazines, has successfully resisted this temptation in his paper on "International Banking Organizations." Of the two institutions, the Fund comes out much better than the Bank in Mr. Bareau's appraisal. He acknowledges that the United States government has used its dominant voice in the affairs of the International Monetary Fund wisely and constructively. Mr. Bareau concludes that while the Fund has compromised on some fundamental issues of its code and has been guided too much by political considerations, it has nevertheless performed a very valuable function by keeping alive a modicum of cooperation in the field of international monetary relations.

In his evaluation of the Fund, Mr. Bareau very properly points out that the economic climate of the postwar years could hardly have been less favorable to the Fund's objectives, but this is perhaps even more true of the Bank. When Mr. Bareau feels unhappy over the fact that the Bank lacks a spirit of adventure and has been too much concerned over the interests of United States investors, who after all put up much of the Bank's loanable funds, he appears to forget that international investment, to flow smoothly, persistently, and on a large scale, needs a political and economic environment radically different from that prevailing during the last few years. Before charging the Bank with unimaginative leadership and lack of adventure, we should carefully consider the Bank's contention that it has found a great lack of soundly conceived projects suitable for its financing. The fact that it has refused to put up money for projects that it considers neither sound nor productive in the light of the present disequilibrium in the world economy provides very little justification for Mr. Bareau's criticism that the Bank "tried to eschew the adventurous."

For the American reader who is interested in an authoritative study of London's financial facilities, Mr. King's paper on the London Discount Market contains much valuable information. This is also true of Mr. Steffenburg's lecture on "Merchant Banking in London" and the study by David Sachs entitled "Survey of the Financial Institutions of the City of London."

F. H. KLOPSTOCK

New York, N.Y.

International Economics

Plowshares into Swords. By OSWALD P. CHEW. (New York: Harper. 1948. Pp. xv, 227. $3.00.)

This book undertakes to indicate the adjustments that are needed in the world by reason of the fact that the United Kingdom, Belgium, Germany, and neighboring countries in the Western world, and Japan in the Eastern world, by stealing a march on the rest of the world, were able to develop far-flung markets for their factory products, and now are faced with the loss of some of their former markets because the rest of the world is slowly industrializing. Others have written on this subject, but none from Oswald Chew's point of view, which is that of a person who has spent his life in the public information service of the United States Department of Agriculture, and, in consequence, has come to see events and developments very sharply in an agricultural focus. Chew writes with the vigor and clarity of a successful journalist, and hence even a sophisticated reader needs to keep his wits about him or he will lose his bearings.

This is not to say that there is little sound analysis in this book. In fact, there is just enough that isn't to lead the author to the dubious conclusion that since the Industrial Revolution the principal cause of wars has been a contest for farm lands; to use the author's phrasing, "modern war is war for farms." The result is a book too much for the comfort of a scholar, in the same class as Vogt's *Road to Survival,* Osborn's *Our Plundered Planet,* Pearson and Harper's *World Hunger,* and Prentice's *Food, War and the Future.*

One is usually helped in thinking through such situations if one first thinks in interregional terms within one country. The natural parallel in this case is the industrial Northeast in the United States. This Northeast has lost a market for particular factory products as, first, the Midwest, and later the South and West, have industrialized. But the Northeast is still growing industrially. It has lost only in percentage of the whole. The latter is true even of little New England. There are those in the Northeast who are unhappy to see the South and West growing faster than the Northeast, but the only reasonable program for its inhabitants is to see that they readjust their industry so that it fits as closely as possible into the changing national economy. The national interest is in getting all parts of the country industrialized in proportion to the resources, and in having each industry grow where it has most advantage. The important consideration for the Northeast is whether the industrialization of the rest of the United States adds enough

to the total national income so that the Northeast's share of it is an increasing absolute amount.

Could such a national development leave the Northeast with less industry absolutely? Surely so, although this is not likely. Also, if it does, other economic activity is likely to replace it.

Now suppose the Northeast were a separate nation. The international interest would be the same as the national interest so far as Northeast, South and West are concerned. But what would the Northeast itself do in such a situation? Obviously it would do all possible to enable existing industries to continue to compete by making them more efficient, by seeking alternative new markets, and the like. Some of its existing industries would find they had comparative advantage and expand, and others would contract. Also some new industries would probably be found. All this would be good internationally too. But Chew's doctrine is to the effect that these measures would not suffice, and the Northeast nation would in due time engage in actual military conquest of the *farm lands* of the South, and West or Midwest. Why farm lands in particular? *So as to be able to produce within its own boundaries the food that it could no longer get by exchanging factory goods for it.*

He says further that even the industrial nations with big foreign markets, except the United States, which has all the land it needs, will presently engage in such conquest so as to be *sure* of having *food* enough, for who knows when they may not lose some outlet, or go to war and face a food block.

He believes that both world wars were induced in this way, and another one will be if we do nothing to prevent it. Surely most historians will consider this a narrow and distorted view of Germany's and Japan's desire for "lebensraum." It happens that the territories most available to both of these countries were exporters of farm products; but had these territories been rich in coal, iron and oil rather than food, they would have been considered much greater military prizes. Consider the Ruhr and Silesia in this connection!

It is true that both world wars did make these countries, the United Kingdom, and some others, want to be more nearly self-sufficient in food; but surely they were no less concerned over sources of iron, oil, and coal. Also, shortage of exchange figured in both postwars, but especially in the second. The vigorous farm price-support measures after World War I came mostly with the break in farm prices from 1928 on, and were directly a response to pressure of the agricultural interests. No doubt the military sufficiency argument strengthened the hands of the agrarian politicos of Europe; very little those of the United States.

The cases of present Germany and present Japan have to be considered in a class by themselves. The readjustments which they need are greatly complicated by the second war.

Chew proposes as a general solution some form of international agreement that will assure industrial countries of their foreign outlets, or delay the loss of them while adjustments are being made, and at the same time assure them of a food supply.

JOHN D. BLACK

Harvard University

ARABIAN OIL. By RAYMOND F. MIKESELL and HOLLIS B. CHENERY. (Chapel Hill: The University of North Carolina Press. 1949. Pp. 201. $3.50.)

Among those who, for one reason or another, are interested either in the economic problems of the Middle East or in international raw materials problems or in the oil industry, it will be pretty generally admitted that the title of this valuable little volume is inaccurate and too modest. As the table of contents shows, only about thirty pages are devoted *exclusively* to oil developments and issues in Saudi Arabia. There is a subtitle "America's Stake in the Middle East" which comes nearer to describing the scope of the work; but the (I am sure, unintended) implication that America's stake in the Middle East is identical and coterminous with the American-owned oil concession in Saudi Arabia is politically unsound and it is amply (if tacitly) refuted by the aggregate of facts adduced in the book itself.

Actually what Mikesell and Chenery have done is: (1) To assemble and interpret all the significant statistical data on Middle East oil and its place in the world fuel economy; (2) To describe the contractual arrangements which govern Middle East oil production and trade, and to analyze the problems (commercial and diplomatic) which derive from this clumsy and unstable pattern; (3) To describe particularly (and as a sort of case study) the various facets of the American concessionary position in Saudi Arabia—the diplomatic, legal, commercial, financial and managerial issues that have arisen; and (4) to appraise the depth and scope of the United States national interest in Middle East oil, and to evaluate the impact of this oil on American foreign policy and vice versa.

For all these services we are in the authors' debt. The factual compilation alone merits praise. The facts are in general not new (indeed, some of the statistical information is, inevitably, already obsolete); but the material is nowhere else available in one place, being scattered through government documents, the petroleum trade press, and a few journal articles. The analysis is penetrating, sound and modestly presented. The specific data on Saudi Arabia tell a fascinating story in concise form.

On the very broadest issues of policy one might cavil. If I read pages 124-25 correctly, the authors would like the experts of the American oil industry to work out an import program that would take account of all domestic interests and activities (including the experimental). To some extent this already happens but I had not supposed economists would commend it. By implication on pages 95-100 and explicitly on page 127 the authors urge ratification of the Anglo-American Petroleum Agreement, thus flogging a quite dead horse. On pages 121 and 128 the authors urge a United Nations conference to establish a world petroleum organization; despite a footnote on page 100 quoting me to the contrary, I do not now think this recommendation is in the realm of reality.

On page 119 it is stated that "American (oil) companies operating abroad can in general be counted on to abide by the wishes of (their) government." That is very nice.

JOHN A. LOFTUS

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Imperfect Competition in International Trade. By S. B. RANGNEKAR. Edited by J. J. Anjaria. University of Bombay Econ. Ser. No. 1. (Bombay: Geoffrey Cumberlege. New York: Oxford Univ. Press. 1948. Pp. xvii, 184. $8.)

As its title indicates, this monograph is a study of non-perfectly competitive pricing as applied to the field of international trade. The basic approach follows the neoclassical reciprocal demand tradition in contrast to the specific commodity approach commonly used in investigating monopolistic pricing in world markets. The study is theoretical in the sense that cases are investigated without detailed preliminary investigation of their relevance for any particular historical setting. Exchange control, for example, is almost ignored, although some of Dr. Rangnekar's conclusions may conceivably have some applicability to such arrangements.

The investigation of various types of pricing arrangements is divided into monopoly and oligopoly, with a number of specific cases considered under each head. Under monopoly pricing, for example, four cases are considered, distinguished according to the number of countries supposed to be engaged in trade and according to whether one country monopolizes the marketing of all its exports or only one. Under oligopolistic pricing, more complicated arrangements are each investigated in turn. Dr. Rangnekar then attempts in a separate chapter to assess the implications of restrictive practices on both national and international welfare. The welfare analysis rests mainly on Professor Pigou's work in this field, combined on occasion with the currently popular "as t'were" doctrine. A final chapter attempts to assess how the earlier analysis should be modified if uncertainty is assumed. Money is introduced at this point and a monetary theory combined from various ideas of such diverse thinkers as Keynes and Mises is constructed. For such eclecticism, one can only commend the author's courage.

Like many doctoral dissertations, this work is mainly of the exercise variety designed to reveal the student's competence in his field. Those already familiar with the literature in international trade theory are not apt to find a careful reading of the book rewarding. Even as an exercise in economic analysis this study has serious limitations. The writing is frequently vague and at times inexcusably jumbled. Conclusions are commonly stated in the comparative form without the alternative mentioned. As a result of the poor quality of the writing, it is impossible to determine at a number of points just what views Dr. Rangnekar is attempting to demonstrate and hence permit a judgment of their validity. There are, in addition, a number of technically inaccurate statements. One is surprised to learn that the inelastic portion of a monopolist's demand schedule is the only relevant portion to him, and that monopoly power in the pricing of products automatically carries with it monopsony power in the buying of resource services. Such a statement as ". . . there is agreement that capital goods embody waiting" makes one wonder if the author has ever heard of F. H. Knight. These deficiencies loom less large when compared with the enormity of the task which Dr. Rangnekar set himself to handle in brief compass. Nevertheless,

it is unfortunate that this work was published in its present form, especially since it inaugurates the Economic Series of the University of Bombay publications.

EARL R. ROLPH

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Gli Ammodernamenti della Teoria degli Scambi Internazionali. By AMEDEO GAMBINO. (Padova: Cedam. 1946. Pp. 61.)

The booklet was written by a professor of economy of the University of Rome and was published by the Economic Institute of the Bocconi University in Milan. It deals with the progressive innovations in the theory of international trade and exchange, and its distinctive feature is an abstract and syllogistic method of analysis.

The purpose of Professor Gambino is to reinterpret the classical postulates of comparative costs and advantages in the light of the modern "equilibrium" theory. The author reviews the various theories of international trade from Ricardo and Mill through Marshall to Haberler and Ohlin. He accepts the assumption that "monetary" costs and not "real" costs determine the flow of international trade, but pursues the inquiry into the relative differences of monetary costs (or Haberler's "substitution" costs) among various countries. He finds that such differences are the result of the combination of productive factors prevailing in each country—and concludes that the relative advantages in international trade are for each country the same as those which may be established for domestic trade.

Of particular interest is the chapter of the book and an introductory note by Professor DeMaria on an "unfortunate criticism" by Pareto of Ricardo's theory of comparative costs. According to Pareto, Ricardo's theory serves to demonstrate a "possible" condition and not the necessary and only condition under which the international movement of goods can occur. Professor Gambino's view attributes Pareto's position to the fact that goods move in international trade if their relative costs are within the margins of their comparative costs in the various countries. Professor DeMaria observes, however, that a country may continue to export goods produced at disadvantageous comparative costs, if such commercial loss were lower than the alternative of closing and liquidating existing investments in export industries.

The author offers some stimulating thoughts, expressed in a very concise form. The booklet could be very usefully expanded, to provide a more readable text on the general subject of the historical development of theories of international trade.

FRANK M. TAMAGNA

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Industrial Organization and Markets; Public Regulation of Business

Cartels in Action. By GEORGE W. STOCKING and MYRON W. WATKINS. (New York: Twentieth Century Fund. 1946. Pp. xii, 533. $4.00.)

Cartels or Competition? By George W. Stocking and Myron W. Watkins. (New York: Twentieth Century Fund. 1948. Pp. 530. $4.00.)

These books are the first two of three volumes sponsored by the Twentieth Century Fund about problems of monopoly, national and international. The first contains case studies of international cartels. The second presents an analysis of cartel activity and an appraisal of its economic impact, together with recommendations as to government policy toward cartels. Thus the two books already printed constitute a full discussion of the international cartel aspect of monopoly problems. A forthcoming book is to be devoted to domestic problems of monopoly.

Volume One supplies a long felt need for relevant data. Facts and documents aplenty have been available in the cartel cases in the Department of Justice, in the records of the Bone, Kilgore, and Truman committees, the Nye committee, and in various special monographs and reports. But this information has been so scattered and disorganized as to be useful only to specialists. Considerable literature of comment has been available, but it has fallen into four classes: scattered monographs of varying quality about particular cartels; analytical summaries by foreign authors, completed before many of the relevant facts were disclosed; propaganda in defense of cartel activities or particular cartels; and impassioned condemnations of cartel activities or particular cartels. Since the war, this literature has been supplemented in the United States by several publications concerned with government policy toward cartels. But there has not been available a single volume in which the facts about the more important cartels are set forth and subjected to careful analysis.

Cartels in Action does not, of course, cover all of the cartel arrangements that have been disclosed in recent years. Since there are more than 100 of these, an attempt at such coverage would have prevented an adequate account of any of the cases. Instead, the book selects for careful analysis eight outstanding examples: sugar, rubber, nitrogen, steel, aluminum, magnesium, incandescent lamps, and chemicals. These examples have been so chosen as to include basic raw materials of agricultural origin, as to which cartel activity has depended largely upon government support; primary metals, privately controlled by large companies which have succeeded in dominating well-defined industries; and electrical and chemical products, as to which cartelization has depended upon the ability of large companies to control technological change and to maintain lines of jurisdiction in spite of the fluidity of industrial boundaries. Cartelization in the chemical industry receives special attention in chapters which first survey the broad organization of the industry throughout the world, then deal with the development of product cartels within the industry as illustrated by the two cases of alkalies and explosives, then describe the comprehensive patent alliance between DuPont and Imperial Chemical Industries, and finally discuss at length the activities of I. G. Farbenindustrie.

Statistics, documentary evidence, and economic analysis have been blended in these case studies. There is no equally authoritative picture of the broad

sweep of cartel activity. In particular instances, for example the chapter on sugar, the authors appear to have slighted the operative techniques of cartelization in their care to analyze the market situation within which the cartel operated. In the sugar chapter, too, there appears to be some variation in the authors' assumptions as to the elasticity of demand and as to the relation of prices to marginal costs, as well as a willingness to assume too readily that losses by producers are disastrous to the world economy as well as to persons directly involved. In the nitrogen chapter, the authors do not bring out the extent to which producers of synthetic nitrogen have used the peculiar problems of natural nitrate production in Chile as a cloak for their own interests. Such minor defects, however, do not obscure the solid and admirable quality of the work as a whole.

Cartels or Competition is a penetrating analysis of the relation between the environment and the growth of cartels and of the effects of cartels upon the economy. It presents two sets of policy recommendations—one by the authors and a longer and more detailed one by the Committe on Cartels and Monopoly appointed by the trustees of the Twentieth Century Fund, the members of which were James M. Landis, A. S. Goss, Marion Hedges, Donald M. Nelson, Jacob Viner, and J. Raymond Walsh. An appendix deals with the prevalence of cartels in the American economy.

The authors treat cartel activities as one manifestation of a trend away from competition toward nationalistic autarchy and business syndicalism in all industrial countries. The rôle of governments in fostering cartels and helping make them effective is emphasized. Nevertheless, the economic consequences of cartels are categorically condemned. While it is recognized that cartels sometimes improve technical efficiency when the cartelized firms stand to gain thereby, it is emphasized that cartels bolster the vested interests of high-cost producers, make prices rigid in a way which probably aggravates business instability, freeze conditions of over-expansion and promote under-investment, and practice price discrimination which destroys equal opportunity. The argument that cartels tend to stabilize an economic system is considered at length and discredited on grounds of both logic and experience. Instead, the authors conclude that cartel restrictions "strengthen the forces pushing toward retrenchment and aggravate the imbalance in the economic system." On the ground that cartels typically aim at preventing change, cartel arrangements are also rejected as means of coping with war-born maladjustments.

The authors recognize that particular cartels may serve the interests of particular nations in cases in which these nations sell the cartelized product to the world at large. But, considering this matter specifically in the case of Britain, they conclude that a nation cannot choose to have only those industries cartelized in which monopoly control would serve its own interests and that a comprehensive system of international restrictive controls would be contrary to the British interest.

Only in the case of raw materials do the authors see any justification for adoption of restrictive policies of the cartel type. The volatility of agri-

cultural prices and the erratic output of mining are regarded not only as problems for the populations whose income is derived from these industries but also as factors contributing to general instability. For this reason, the authors support governmentally sponsored commodity agreements organized on an international scale and designed to prevent fluctuations in agricultural income by such devices as buffer stock operations and to assure steady exploitation of mineral resources by incentive forms of differential pricing and by tax adjustments. They do not, however, discuss the degree of probability that commodity agreements will be used along the suggested lines for the suggested purposes instead of in other and more restrictive ways.

The authors recommend a policy designed to curb cartel restrictions, by international agreement, if possible, and by unilateral action on the part of the United States if necessary. They conceive such a policy as including not only direct attacks on restrictive practices, but also modification of patent laws to require the compulsory licensing of patents; development of government policies toward research designed to foster the exchange of technical information; national and international action to simplify corporate structures and to insure disclosure of the ownership and control of large corporations and the financial relations between them; reduction or abandonment of governmentally established barriers to international trade; and international coordination of national monetary policies.

The Twentieth Century Fund's Committee on Cartels and Monopoly likewise recommends a policy of breaking up cartels, coupled with concerted international action to reduce trade barriers, encourage international investment, and, if possible, check depressions. It regards the proposed charter of the International Trade Organization as an important, though not sufficient, step in making such a policy effective. It emphasizes the possibilities of unilateral action by the United States to supplement what is done through I.T.O. by a vigorous application of the American antitrust laws. To this end it proposes certain modifications of American law, most important of which is repeal of the Webb-Pomerene Act in favor of a substitute statute which would subject export associations to clearer and stricter rules. It recommends patent reform, international if possible and in any case domestic, and the continuation of efforts to dismember German and Japanese cartels through the activities of military government. It lends general support to the I.T.O. policy toward commodity agreements but proposes tightening the safeguards in certain respects.

This volume probably will become the authoritative analysis of the economic impact of international cartels. No previous American treatment of the subject has been so carefully reasoned and so well grounded in facts. Few recent works dealing with any aspect of market policy have shown comparable breadth of view, clarity of argument, and temperate balance of judgment. This reviewer's enthusiasm cannot be wholly due to the fact that on most points his own conclusions agree with those of the authors; for in chapters where this is not true, such as that which discusses commodity agreements, he finds the same virtues.

Such faults as the book possesses are subtle ones. The critique of cartels contained in this volume takes as its starting point an unrealistic assumption of relatively perfect competition as a practical alternative. An instance is page 279, in which a generally free market is said to reduce prices to the necessary costs of production and to provide a mechanism which allocates resources, organizes production, distributes income, and rations goods in a way which, though not perfect, is superior to any alternative which society has been willing to use. To rest the case against cartels upon the belief that competition has such virtues is to give cartels the status of a practicable alternative from the point of view of any one who finds competition unsatisfactory either for the economy as a whole or for some segment thereof. The sympathy which some socialists display for cartels rests upon this way of formulating the issue. Since the authors have made clear the inherently restrictive purposes and tactics of cartels, it should be sufficient for them to show that whatever imperfections competition may have can only be worsened by deliberate anti-productive maneuvers on behalf of group interests.

There is also in this volume something less than complete consistency as to methods of economic analysis. In certain passages, the authors treat the policies of cartels and cartel members as maneuvers for position in which profits on particular commodities in particular markets may be sacrificed to broad strategic considerations. At other points, the marginal analysis is applied with full acceptance of its implication that the motive of a trader is to maximize his profit on a particular commodity in a particular market. The disharmony between marginalism and the facts of life is, of course, not peculiar to this volume; and the authors have presented unusually rich material and valuable suggestive passages pointing toward the development of an alternative analysis of business positions and their economic significance.

CORWIN D. EDWARDS

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The Basing-Point System. By FRITZ MACHLUP. (Philadelphia: Blakiston. 1949. Pp. vii, 275. $5.00.)

Professor Machlup's new book on the basing-point system may be a disappointment to many in his wide circle of admirers among professional economists. Possibly, however, it will gain him new admirers in the wider audience to which it is also addressed. Present, as usual, are his pungent style, his sly humor, his gift for clear exposition of complicated matters, his masterful use of the analogy. The layman accustomed to dry and technical treatises from economists will find this a pleasant change.[1]

The author leaves no doubt that he is opposed to basing-point pricing. He attempts to prove that it is "monopolistic," in the sense of involving "collusion or oppression," and emphasizes what he calls "the peculiar interde-

[1] Despite an obvious effort toward simplifiied exposition, however, some technical terms—*e.g.*, marginal cost—creep in, without explanation, which may make the layman's perusal less happy than was indicated above.

pendence between the operation of the basing-point system and the domination of the industry by powerful concerns." In more detail, he argues that the system stifles competition, wastes transportation resources, results in higher prices and lower output than would prevail under f.o.b. mill selling, and causes mal-location both in the industry using the system and in industries using its product. A compulsory f.o.b. mill pricing system is endorsed as "the only practical alternative . . . in industries with heavy concentration of control."

In advocating, to a general audience, a definite position on a subject of current public controversy, an economist has to try very hard to refrain from slipping into the tactics of a debater. Professor Machlup has largely avoided this temptation. That he has definite views is clear. Yet only occasionally does persuasion possibly interfere with enlightenment. Once or twice, making opponents look ridiculous seems to take precedence over discovery of the truth. Conclusions are occasionally stated with what may be objectionable dogmatism and absence of appropriate qualification. Some may dislike the ways in which Machlup disposes of contrary views on the part of other economists. They are either not economists ("What can be so offensive and so appealing in a pricing method that economists would attack it vigorously while professors of marketing come forth to defend it?"); or they have been "paid witnesses" for "vested interests," and one wonders "how much of a bias is apt to creep into their thinking, in spite of their good intentions"; or they can be dismissed as spinners of abstract theories ("Almost anything can happen in this brave world. Economists have much imagination and succeeded in developing theories of a noncollusive development of the basing-point practice under oligopolistic conditions. . . . In a rather technical paper, Professor Smithies concluded, after complicated analysis . . .").

But the disappointment suggested in the opening sentence is not over such relatively trivial matters of presentation. It is more fundamental. To the professional student of price policies, the disappointment will be primarily that the book does not say a great deal that is new. There is neither new factual material, nor, more important, much really new, rigorous, theoretical analysis of major issues. As the author insists, the problem of the basing-point system is essentially a theoretical problem. From a master of pure theory, we might have expected some new abstract analysis at a high level of intellectual rigor.

There are, to be sure, some excellent pieces of exposition and analysis. Many controversial points are illuminated. There are other parts of the argument, however, that are less than completely convincing. In the approach to one of the most crucial problems, Professor Machlup's analysis is even deceptively non-rigorous. The systematic discussion of relative price levels under basing-point and f.o.b. pricing comes on pages 204-9. The following sentences represent, fairly, I think, the heart of the exposition:

> Assume that an industry is forced to switch suddenly from basing-point pricing to uniform f.o.b. mill pricing. Assume further that the level of mill net prices is to stay unchanged. In this case each mill will set its f.o.b. mill price at the figure of its previous average mill net price. . . .

> First, savings may be effected by using the cheapest means of transportation for shipments where alternative means [e.g., water] are available. This should reduce some delivered prices even if no orders are transferred from more distant to closer mills. But, secondly, there will be a tendency for consumers to place order with mills from which the freight cost is lowest. . . .
>
> Up to this point, the benefits to consumers have all come out of savings in freight costs. . . .
>
> When consumers in their attempts to save unnecessary freight costs transfer orders to closer mills, some producers may find their sales volumes shrinking so badly that they must start competing for more business. This, under the uniform f.o.b. mill price system, would take place chiefly through the lowering of their f.o.b. mill prices. . . .
>
> For reasons explained earlier, producers faced with the necessity of competing for business will probably no longer have the inhibitions against lowering prices that they had under the basing-point system. In short, price competition will have come into play.

Note, now, the second and third sentences: "Assume further that . . . each mill will set its f.o.b. mill price at the figure of its previous average mill net price." Nothing that follows justifies nor removes this assumption.[2] Suppose, however, that we "assume" something else: namely, that each (base) mill makes its previous base price its new f.o.b. price. There is not space for a rigorous demonstration (which the reviewer believes can be supplied) that at least under certain assumptions the mill shifting to an f.o.b. system would set the same f.o.b. price as its previous base price. *In any case*, if we are merely to start by "assuming" something, this is no more ridiculous an assumption than Machlup's. But in this case, the level of delivered prices to consumers would *not* initially be lower.

To be sure, we still have the second reason for price reduction: competition for business by mills whose sales have declined. But, as Machlup himself admits, this is as good a reason for other mills (who have gained business) to raise prices, particularly if there is little unused capacity. Suppose, however, that the redistribution of business does result in an outbreak of price competition, because the mills that lose sales will seek to regain them and the mills that gain sales previously had unused capacity, and seek to hold their enlarged business. This is possible. But if the switch in pricing systems redistributes business (as it almost surely would), it is because the locational forces are different under the one than the other system. What might occur is some distress selling by badly located mills (*i.e.*, badly located under the

[2] The reader should be warned that Professor Machlup feels I have made an unjust error of interpretation here. He points out that the argument that changes in mill prices would arise from competition for business removes the initial assumpton of unchanged mill nets, which was made only for purposes of exposition. I do not believe I have been unfair. The quotation indicates his method, which is to start from an assumed price level and indicate forces operating to change it. Perhaps I could better have expressed my criticism by saying that this procedure seems a poor substitute for an *analytical* solution which would first identify "equilibrium" levels of price under each pricing arrangement, and then compare them. This Machlup never does.

new system). But if mills had "grown up" under f.o.b. pricing, or *after* locational readjustments following a shift in pricing method had occurred, *this* force in the direction of price competition would not exist. It is not inherent in the f.o.b. method of pricing.

Nevertheless, the nature and strength of competitive forces under the two systems are different, in ways that are subtle and hard to evaluate. The reviewer ventures the opinion that a realistic comparison of the price results under the two systems can be made only industry by industry, with careful regard for the many physical and institutional facts—such as, for example, the particular geographic configuration of markets, and the trends of demand in these markets. In the absence of such special consideration, it appears difficult to make dogmatic judgments as to relative price levels under f.o.b. and basing-point pricing.

But there is a third alternative, freight absorption without a basing-point system. Although Professor Machlup has little discussion of this possible arrangement, he admits that unsystematic freight absorption may be a powerful competitive force. Some, in fact, fear that ability to discriminate locally (coupled with imperfect knowledge) can lead to "ruinous" competition, in which delivered price in each local market gets reduced to the bare level of delivered marginal cost of the seller with the second-lowest delivered marginal cost in that market, and socially desirable investment retarded. Thus compulsory f.o.b. mill pricing might be the best thing that could happen from the standpoint of firms in some industries. If the only legal form of price competition required reducing all prices to reduce any, the impetus to price cutting might disappear completely; while the prohibition of freight absorption would remove any temptation to a costly form of non-price competition.

It seems possible that the strange and often confusing ambivalence of some basing-point defenders results from a perhaps unconscious switch in the comparison being made: (as compared with non-systematic discrimination) basing-point pricing provides stability against cut-throat price warfare—hence the system can be defended as a barrier against "ruinous" competition; but (as compared with compulsory f.o.b. pricing) prices would not be reduced if basing-point pricing were outlawed, because it is ridiculous to assume that oligopolists simply wearing new clothes would immediately become short-sighted enough to compete in price. Machlup's best point here, I think, is his emphasis upon the importance of domination by the big firms: the latter might not wish to compete under f.o.b. pricing, but their smaller competitors might, and ending of freight absorption would deprive the big firms of the opportunity for oppressive retaliation through the practice of intensive sales cultivation or price reductions in the local markets of small sellers who stray from the fold. But one may wonder whether other bases for oppression might not remain.[3]

[3] It is necessary, I think, to distinguish two purposes for oppression. One is to prevent small firms from upsetting the applecart by price cutting. Oppression may or may not be necessary to achieve this result—the small firms may be as far-sighted as the large, and their own profit prospects, "intelligently" viewed, may lead them to refrain from action

This brings us back again, then, to the issues of collusion and oppression, which Professor Machlup makes so central. There can be no doubt that overt collusion has often figured in basing-point pricing; some of its most absurdly wasteful results can only be so explained. Likewise, the existence of oppression is the only possible explanation of part of the history of base prices. But there remain the very large areas of questions as to the *meaning* of collusion and oppression when numbers are small and industries mature, and whether our legal tools are sharp enough to cut away collusion and oppression whatever the pricing system followed. Those who fail to join Professor Machlup's crusade against basing-point pricing perhaps do so basically because of doubts on this score.

Certainly, Professor Machlup has made some valuable contributions to the basing-point controversy; but he has not provided all of the answers, and we can be sure that the controversy will continue.

GARDNER ACKLEY

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Maintaining Competition: Requisites of a Governmental Policy. By CORWIN D. EDWARDS. (New York: McGraw-Hill. 1949. Pp. xi, 337. $3.75.)

The avowed purpose of this volume is to describe the content of a governmental policy designed to maintain "the competitive system" in the United States. The system thus to be preserved is simply one in which most markets, with the exception of natural monopolies, are primarily regulated by the active rivalry of the participant sellers and buyers. It is "simpler, cruder, and less comprehensively beneficial than the perfect competition of classical economics"; it admits of imperfect knowledge, confused motivation, product differentiation, selling efforts, and the recognized interdependence of rival firms. As such, this competition is not a sufficient automatic regulator of the economy, but it should be sought as one goal of a broader public policy aimed at maintaining a stable and prosperous economy.

The essence of this competition is found in "access by buyers and sellers to a substantial number of alternatives and in their ability to reject those which are relatively unsatisfactory." Its general structural requirements are: (1) an "appreciable" number of sellers and buyers for each general sort of good; (2) inability of any trader by virtue of size to coerce his rivals; (3) responsiveness of traders to profit-loss incentives; (4) no commercial agreements among sellers or buyers; (5) relatively easy entry to any market; and (6) no artificial barriers to buyer-seller relations and no artificial preferences to individual sellers or buyers.

The policy appropriate to the maintenance of such competition involves,

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that would ultimately leave all firms—large and small—in a worse position. The other situation involves possible conflicting interests between small and large firms. For example, maximization of profits by one (large) firm may require that other (smaller) firms at a distance remain non-base mills, or set higher base prices than is in their own interest to do. This can be achieved only by domination, because it involves a *transfer* of potential profits from one to the other.

first, an attack on undue concentration, collusion, and barriers to entry within the designated "competitive" areas, and second, a careful formulation of policy in the regulated non-competitive areas in order to avoid publicly sponsored private cartels and to secure reasonably competitive results under regulation.

With this general preamble, Mr. Edwards proceeds to examine various aspects of the problem at length, being mainly concerned with the detailed goals of a public policy toward competition and with detailed suggestions for legislative and administrative reform. He turns attention first to restrictive agreements among traders, which he holds to be generally undesirable regardless of allegedly beneficial intent. Explicit agreements should be directly attacked; tacit collusion should be undermined by attack on "supplementary collusive uniformities" such as detailed agreements on terms of sale, etc.; price leadership should yield at least in part to attack on coercive tactics and on undue disparities in size of firms. For these purposes, in spite of some unfortunate turns of interpretation, the substantive content of the existing antitrust laws is generally adequate, although codification of a list of specific practices which are generally regarded as objectionable would be helpful.

There are, however, numerous exemptions applicable to private agreements which should be removed or modified. Edwards argues that the Webb-Pomerene Act should be repealed, together with resale price maintenance legislation. The special exemptions allowed to agricultural cooperatives should be restricted by excluding from membership in exempt cooperatives all corporations and any persons not primarily engaged in growing crops. Cooperatives should be prohibited from coercive actions and attempts to monopolize, and the Agricultural Marketing Agreements Act should be repealed outright.

The author is less forthright, however, in the knotty case of labor. After considerable weighing of pros and cons, he limits himself to the proposal that the Apex-Hutcheson doctrine be modified by an act which would clearly distinguish commercial competition from labor relations and would make unions fully subject to the antitrust laws so far as their activities aim at control of commercial competition. The monopolistic activities of unions within the proper sphere of labor relations are left for treatment by special legislation and are considered "apart from the antitrust laws and even apart from the competitive policy."

The problems of concentration of market control and of economic power are found to occur with respect to simple horizontal monopoly, vertical integration, and overgrowth of the giant diversified firm. After examining the adverse consequences of such types of concentration, the author considers the complexities of the simple horizontal concentration within the single industry. He concludes that most of the real (as opposed to strictly pecuniary) economies of scale are ordinarily fully exploited within the single plant, that the arguments for real economies of scale to multi-plant firms are unsubstantial or overrated, and that there are many instances where such firms could be dissolved with economic advantage. For purposes of policy he would find the

number of firms unduly small (and thus seek dissolutions) "when the buyer no longer encounters substantial variations in business policy; whether —(this) is due to single control, to agreement, or to mutual forbearance among a few large enterprises"; he would also find a firm to be unduly large "when it habitually engages in acts of intimidation and coercion against [its rivals]." When either of these results is definitely threatened, similar intercession is recommended as a reasonable precaution. Objectionable vertical integration would be found first wherever a firm with a legal monopoly in one field enters another in which monopoly is unlawful (this should be forbidden); or wherever there is a substantial and not clearly justified disproportion in the sequence of a vertical integration which greatly disadvantages non-integrated competitors. Excessive firm size *per se* would be found where a firm "has coercive power or is habitually able to obtain discriminatory privilege."

For attainment of the policy goals thus implied, the author relies in part on "environmental changes." He would establish a federal incorporation for interstate firms and would limit the use of holding companies, interlocking ownership, intercorporate loans, and interlocking directorates, though to a not precisely specified degree. He would amend Section 7 of the Clayton Act to forbid all acquisitions of the stock of competing firms, without any test of results, and would add legislation limiting intercorporate acquisitions of capital assets under rules designed to check the growth of monopoly or great firm size. He would also favor legislation and taxation to preserve the impartiality of banks, discourage excessive reinvestment of earnings by large firms, and assist the growth of small enterprise.

With respect to direct attacks on existing concentration, however, he is less explicit. He does favor definite legislation affecting integration by legal monopolies, and would establish at law a rebuttable presumption that simple bigness in excess of some maximum size is against the public interest and hence illegal. But he is not too clear about the simple trust-busting job implied by any application of his standards of undue fewness in the single market. This reader received the impression that he stakes his main hope on a revision of judicial interpretations of the Sherman Act to accord with such standards.

For the balance of his policy, Edwards would direct attention to limiting coercive activities and to facilitating easy entry to markets. Various explicit proposals are advanced concerning discrimination (including some revisions of the Robinson-Patman law), tying contracts (requiring a strengthening of Section 3 of the Clayton Act), reciprocal buying, etc. Basing-point systems would be outlawed but sporadic freight absorption permitted. Limits would be placed on exclusive dealing arrangements, and modification of local licensing and regulatory laws which unduly restrict entry would be sought.

In an excellent brief treatment of the patent law problem (pp. 216-48), Edwards concludes that we should (1) secure a better procedure for scrutiny of patent applications and disclosure of the inventions patented; (2) require compulsory licensing where needed to safeguard against non-use or abuse

of patents; (3) require cross-licensing where patents are complementary; (4) make patent pools non-exclusive where the patents pooled are a source of substantial economic power; and (5) prohibit exclusive, discriminatory, and restrictive licensing in fields of use for a patent where the patentee does not operate.

After a number of warnings anent the scope and nature of controls in non-competitive regulated areas, the author turns to administration. Some of his major proposals here are (1) for the establishment of a "central competitive agency" charged with coordination and appraisal of the activities of semi-autonomous regulatory agencies and with recommending changes to them or to Congress; (2) for a quadrupled staff for the Federal Trade Commission and the Anti-Trust Division; (3) for various changes in law and procedure affecting consent decrees, penalties in civil suits, subpoena power in such actions, and rules of evidence in antitrust cases; and (4) provision of a rule-making power for the antitrust agencies. His analysis of the administrative and litigatory problems which underlie these proposals is good.

Taken as a whole, the work presents a well-balanced and comprehensive program for the preservation or rejuvenation of a workable free enterprise economy in the United States. Its principal contribution perhaps lies in the elaboration of an array of legislative changes and innovations consistent with the vigorous pursuit of the American antitrust policy and philosophy, and in the testing of each suggestion in the light of empirical limitations and economic logic. Its weaknesses are those generally intrinsic in efforts of this sort. It does not demonstrate nor adequately analyze the extent to which market behavior would be altered by the implementation of its various proposals. It points to aspects of economic structure or behavior which seems adverse to good over-all performance, and rests on the assertion that if these were remedied things would be somewhat better. The standards of desirable structure and behavior are at crucial points vaguely defined, with heavy reliance upon terms such as "substantial variations in business policy," "appreciable" number of sellers, "coercive power," etc. We could better assess the potential merit of Edward's policy if we knew more exactly what these terms mean to him or would mean in practice, and if we could thus guess at the sort of economic behavior which would emerge from market situations which met his standards. The labor issue is rather casually passed over, although it seems integral to the general problem attacked, and the embarrassing issues of tacit collusion and price leadership are viewed hopefully but certainly not resolved. Nevertheless, Edwards has put forward a systematic program for experiment which is well worth further analysis and evaluation.

JOE S. BAIN

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Pricing of Military Procurements. By JOHN PERRY MILLER. (New Haven: Yale University Press. London: Geoffrey Cumberlege. 1949. Pp. xiv, 292. $4.00.)

This book is an excellent summary and appraisal of the economic signifi-

cance of military procurement policies before 1939 and during World War II. It concludes with recommendations as to procurement policy in a society at peace but with large military expenditures continuing. The book is well written, the points made are clearly stated, and the author makes explicit the point of view from which his analysis stems. A final chapter presents the opinions of a conference on pricing military procurement which critically reviewed an earlier draft of Miller's book.

The emphasis throughout is on pricing. While recognizing that the overriding purpose of military procurement is to secure necessary military supplies, it is contended, nevertheless, that this can be done more effectively by determining prices which places upon the supplying contractor some impelling reason for conserving labor and materials. Underlying this general desire to use the price system to promote efficiency along the lines of Cassel's "Economic Principle" there is the desire to "preserve our democratic institutions, individual initiative, and the decentralization of decision-making" (p. 16.).

In times of peace but large military expenditures (crisis times), it is recognized that the competitive price system must be buttressed with fiscal and monetary policies which "avoid chronic tendencies toward unemployment on the one hand and inflation on the other" (p. 9). War will, of necessity, bring other controls including specific price controls, priorities, limitation orders and allocations. These may aid in proper pricing of military procurement in wartime but will not dispense with it. The pricing of military items, it is argued, should generally be left to the military services. Even in wartime the author believes that monetary and fiscal policies can accomplish much and thus make less imperative the detailed regulation of prices.

Negotiated contracts rather than competitive bidding is recommended as the best device for setting prices which will relieve contractors of those risks over which they have no control, while at the same time allowing them to bear risks which they may reduce by good management and efficiency. The incentive for such improvement is the added profit which good management brings. The control of raw material prices and of wages may aid this process by reducing the risk factors which are beyond the control of the contractor. Other devices, such as accelerated depreciation, government constructed facilities and government purchased equipment and special materials are all recognized as having merit for this same reason. Renegotiation of profits, while having morale-building advantages, has some considerable disadvantages, since the efficient producer who has reduced cost may be allowed no more, and perhaps less, profit than the inefficient who have raised costs. It also creates the tendency to think of close pricing as less important because profits are controlled.

The author clearly indicates that the negotiated contract is not a simple formula. It is a way of constructing contractual terms which, if based on sound information, can meet the various purposes of the military services and, at the same time, take into account different problems of the suppliers. Trained personnel are essential as is a general spirit of cooperation for a "fair deal." It also requires that purchasing and specification drawing be more closely integrated.

This reviewer is firmly convinced that the "formal bid" procedure is almost worthless under present industrial practices. That an intelligently negotiated contract is superior seems evident to him. But in wartime the intelligent and well-informed negotiation of close price terms is difficult and perhaps impossible in many instances. It is, however, about the only method that is at all workable so long as the contractual program must be carried forward in terms of a purchase and sale for a price. The effectiveness of price in promoting economy of resources is extremely difficult to prove. The mass of accounting data may, in many instances, not really reach to the root of the real cost which should be reduced. The advantage of securing the contractors help in being economical is desirable, but how effectively this can be done through close pricing, particularly in war time, is questionable. Miller's conclusion (p. 221) that the World War II "evidence of the over-all effectiveness of the services' pricing policies and procedures is not conclusive" would be further emphasized by the reviewer. The fact that we won the war, that we carried through the greatest procurement of any military enterprise in world history or that "once conversion to war production had been effected prices negotiated on military contracts became increasingly reasonable" (p. 221), are not pertinent to the special point of economical use of resources through pricing.

That what can be done by this method should be done, is certainly obvious; that it may be considerable in peacetime, given intelligent and honest personnel, is probably true; but in wartime, when under great pressure to make every resource count, other more positively effective devices will be required irrespective of their authoritarian character.

RAYMOND T. BOWMAN

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Land Economics; Agricultural Economics; Economic Geography

Urban Land Economics. By RICHARD U. RATCLIFF. (New York: McGraw-Hill. 1949. Pp. xii, 533. $5.50.)

To the reviewer's knowledge, Ratcliff's work is the first text on *urban* land economics since 1928 when the real estate boom of the 'twenties was on the wane. In the interval, profound changes have occurred in urban land use and public attitudes toward land use problems, and some progress has perhaps been made in our understanding of land use phenomena. In the interval, too, texts on principles of urban real estate have covered much of the ground usually encompassed in urban land economics, but neither subject matter nor analytical treatment was quite commensurate with the requirements for a text on urban land economics. On the other hand, texts on general land economics devote most of the space to non-urban land uses.

Thus, the appearance of the first text within twenty years would, of itself, command unusual interest. This interest is heightened by Ratcliff's systematic and comprehensive approach to the subject and by a presentation reflecting the author's experience in applied research as well as in teaching. A great deal of empirical material brought together under one cover should increase the usefulness of the book for classroom purposes. Unquestionably, this is the

most inclusive and advanced text on the subject, and one that reflects the vast changes in this field during the past two decades.

After an introductory chapter on the institutional aspects of real property, Ratcliff devotes two chapters to the city as an economic and social complex and a chapter each to the demand for housing and for non-residential space. The supply side is covered by four chapters on the construction industry, the building process, and financing, including the federal financing aids. The interactions of demand and supply are treated in two chapters on urban land market functions and organization and on the housing market. Land income and value as well as city growth and structure are analyzed as products of land market forces. The final three chapters are given over to a brief discussion of urban land policies generally and a more detailed discussion of housing policies. Thus, the text in sixteen chapters covers a broad range of subjects held together by the author's focus on the market concept.

Into this framework Ratcliff has been able to inject additive materials, such as his detailed observations on the so-called filtering process in housing and on retail locations. His dispassionate discussion of current housing problems and policies, comprising about 100 pages, is not only useful but refreshing at a time when the issues are beclouded by emotional approaches and *ex parte* statements.

In the selection and organization of subject matter as well as in the analytical treatment, Ratcliff's text is a significant reflection of the present "state of the arts" of urban land economics. By the same token, the book raises questions directed toward the contents of the discipline rather than toward Ratcliff's truly substantial contribution. Urban land economics has as yet to define its field. Attempts to treat within a general framework the admittedly topical housing problems, construction economics, real-estate financing, city growth, and the theories of land value and urban locations are always in danger of doing justice to only a few of the subjects (even in a 524-page text such as Ratcliff's). Concentration on a more limited range of subjects would probably advance progress in a discipline which the author himself characterizes as "immature." For example, Ratcliff, in Chapter 13 on "City Growth and Structure," highlights two basic problems of urban land use: the relationship of land use to the site and the evaluation of space relationships. These two problems would bear much more extensive and penetrating analysis than is possible in an all-embracing framework of urban land economics.

Urban land economics is as yet preoccupied with descriptive materials and institutional analysis, which tends to obscure such principles of urban land economics as may be developed, and makes it difficult for the student to identify the theoretical structure. The linkage between general economic theory and principles of urban land use is yet to be more fully established. It is perhaps characteristic that even Ratcliff, who is more conscious of the need for a theory of urban land use than most writers in this field, and more successful in developing it, devotes twice as much space to the administration of real estate taxes as to the incidence of taxation.

Since urban land economics finds it difficult to delimit the field and

emphasizes descriptive analysis, the materials furnished to the student more often than not lack balance. As an illustration, 21 pages each of the present text are devoted to central issues in urban land economics such as land values and market functions; in contrast, 73 pages deal with credit and financing and 170 pages with various aspects of housing and housing policies.

Urban land economics has as yet to resolve the difficulty of focusing on the market concept while recognizing the importance of non-economic determinants of land use phenomena. The author shows full awareness of this problem but, when the chips are down, falls nevertheless into simple economic determinism, as in the statement that the city structure "is determined through the dollar evaluation of the importance of convenience" (p. 375).

Let it be said again that these comments do not detract from the real value of this text. It is because of the representativeness of Ratcliff's approach and its generally high quality that his book raises questions as to the orientation of urban land economics as a discipline.

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Labor

Partners in Production—A Basis for Labor-Management Understanding. By the Labor Committee of the Twentieth Century Fund, assisted by Osgood Nichols. (New York: The Twentieth Century Fund. 1949. Pp. ix, 149. $1.50.)

This small volume is the sixth of the series of reports by the Labor Committee of the Twentieth Century Fund. The volume, according to its foreword, formulates ". . . a new philosophy of labor-management relations on which both labor and management could agree." The present membership of the committee consists of Chairman W. H. Davis and Messrs. J. A. Brownlow, W. L. Chenery, H. Coonley, H. W. Payne, S. H. Slichter, H. W. Steinkraus, and E. E. Witte.

Chapter 1 poses the problem of conflict or cooperation in labor-management relations. The committee finds some evidence that cooperation is growing in the small percentage of working time lost in strikes (even in 1946), in a decline in bitterness in strikes (because employers did not attempt to operate), and in a shift in attitude as union organizers have been replaced by administrators and as employer belligerency has waned. The contention is also supported, they believe, by the observations (1) that few employers have taken advantage of the Taft-Hartley Act and (2) that events have discredited the Marxian concept of class struggle.

The second chapter, "The Goals and Attitudes of Labor and Management," constituting nearly one-half the book, is a useful introduction to much of the literature on worker and management motives. It consists of a

commentary woven around judicious quotations from or references to the writings of such students as Herberg, Bakke, Ross, Roper, Shister, Reynolds, Whitehead, Roethlisberger and Dickson, Williams, Mathewson, Tannenbaum, Harbison and Dubin, Drucker, Chamberlain, and others.

In Chapter 3, the goals of labor and management are classified and evaluated under three headings: mutual goals, seeming conflict, and real conflict. A mutual goal is involved in the worker's desire for advancement. This can be met by a secure union if it gives up strict seniority in promotions. Seeming conflict is involved in such issues as the introduction of technological changes and the problem of managerial prerogatives. To the latter issue the following possible solution is advanced (pp. 107-8): (1) Let the content of policies be a proper matter for bargaining; (2) Let the administration of the jointly accepted policies be management's responsibility, subject to (3) the union's freedom to invoke the grievance procedure. Thus the committee, in common with many other observers, rejects the idea of blocking out a proper subject matter for collective bargaining. To the committee, unions generally do not want to take over the job of management.

Real conflict is involved between labor's desire for security and management's desire for profits. Potential compromises include full acceptance of the union, stabilizing employment, severance pay, pensions, and evoking the will to work.

The "new philosophy" toward which the report is pointing is actually the old solution of "industrial democracy," some aspects of which have been described earlier by such writers as the Webbs, Slichter (industrial jurisprudence and union-management cooperation) and Bakke (mutual survival). The philosophy is not expressed here precisely as indicated by the following two quotations of different import and emphasis:

> A contribution can be made toward the solution of the problem of the age—the relationship between people—by letting the citizens of the nation's shops govern themselves; that is, to the extent that it is practicable and they are ready and able (p. 131).
>
> The Committee therefore recommends: That in all plants in which there is union representation management and organized labor assume responsibility for the integretation of the union into the plant organization as an effective channel of two-way communication from managers to workers and from workers to managers (p. 147).

The implications of labor "participation in exchange for responsibility" are not spelled out. In this connection Professor Slichter's examination of the reasons for the failure of some union-management cooperation plans is relevant. Also comparison with the Catholic, socialist or communist plans advocated by some union leaders would be desirable in order to indicate that industrial democracy is a means to different ends.

The above paragraph implies that, like its predecessor, *Trends in Collective Bargaining*, this book is somewhat mistitled. It is by no means a comprehensive discussion of the problems of partnership in production. The goal is stated,

but the decision to use the slick-magazine style and level of writing apparently inhibited the analysis of it. In the reviewer's opinion, development in greater detail of the ideas advanced in the last two chapters would prove more convincing to labor and business leaders.

F. S. DOODY

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Labor in Postwar America. Edited by COLSTON E. WARNE and Associates. (Brooklyn: Remsen Press. 1949. Pp. xii, 765. $10.)

This is a successor volume to *War Labor Policies* (Volume 1, *Yearbook of American Labor*), published in 1945. The two volumes are essentially similar in organization and treatment, though several of the editors and about two-thirds of the contributors have changed. Such differences as exist are due primarily to the shift from a wartime to a peacetime economy, with the attendant relinquishment of governmental controls over wage, price, and manpower policy, and the corresponding growth in scope and importance of collective bargaining. Sections on labor and the government, wartime union policies, and international relations of labor have been dropped, and a section added dealing with developments in labor legislation. Similarly, changes have been made in the specific topics included in some of the sections. Thus the list of key industries surveyed has been expanded to include a number not vital in war but significant in the peacetime economy, and chapters have been added on industrial relations in occupied Germany and Japan.

The thirty-one contributions that comprise the present volume, except for the concluding chapter, are grouped under five main headings: postwar setting, changes in American labor conditions, developments in labor legislation, labor relations in key industries, and labor relations of special groups. In addition, there are several appendices, including a chronology of the stabilization program after VJ-Day, a detailed analysis of the counter-march in labor legislation, and a roster of American labor unions.

An enormous mass of information dealing with virtually all important aspects of labor relations in the immediate postwar years is analyzed, organized, and presented in usable form by the thirty-five specialists whose contributions make up the volume. Some of them, holding governmental research or administrative posts, report developments in the areas with which they are officially concerned. The bulk of the contributions, however, come from academic economists rather than government officials, reversing the distribution of authors in the earlier volume. Though this should permit much more in the way of critical analysis, the emphasis in the volume is on straightforward factual presentation. Indeed, with three dozen contributors and editors, any other treatment would have created fresh difficulties, and impaired the volume's usefulness as a reference manual.

The structure of the volume makes for some overlapping. With separate chapters, for example, on Supreme Court labor decisions and on industrial

relations in coal, inevitably there is some repetition, for certain leading cases must be treated in both chapters. Similarly, different authors cannot write on such closely related topics as decontrol of wages and prices, basic labor conditions, and urban price trends without touching on similar developments. By the time the reader comes to the detailed story of industrial relations in pace-setting industries such as coal, steel, or automobiles, he has been made familiar by earlier chapters with many of the important issues, now to be presented in a different context or from a somewhat different point of view.

This is not a book designed to be read through; it is too choppy for that, since it lacks a story that flows though the volume. Rather each chapter is a unit in itself, telling a complete story of its segment of the vast and complicated postwar labor drama. The grouping of topics lends order and some cohesiveness to the volume, and a concluding chapter by Dorothy W. Douglas, "A Balance Sheet for Labor," pulls together some of the strands and gives some appraisal of significant postwar trends. Students will find the volume most helpful as a quick reference manual for labor developments following the war, and teachers will find many of the chapters useful as supplementary readings.

Where a volume is made up of so many separate contributions, all of them competently and many of them unusually well done, it is difficult for the reviewer to single out some for special attention without being unfair to the remainder. Any selection made may be a better index to the interests of the reviewer than to the quality of the contributions. Nevertheless, if this reviewer were to mention any single contribution, it would be the detailed analysis of the conservative swing in federal and state labor legislation prepared by David Ziskind. Emily Clark Brown is among the others who make very able contributions to the volume.

Colston Warne and his associates have done their job in a competent and scholarly manner. Their comprehensive survey of postwar labor developments should serve as a valuable reference source for many years to come.

JOEL SEIDMAN

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Labor in Norway. By WALTER GALENSON. (Cambridge: Harvard University Press. 1949. Pp. xiv, 373. $5.00.)

"Few books have explored the institutions and the policies of a country in their bearing on industrial relations and the role of labor in the community with such insight and thoroughness as Dr. Galenson's *Labor in Norway*." Being in complete agreement with this introduction to the foreword by Professor Sumner H. Slichter, I may as a Norwegian add that "few books" may well be substituted by "no book" if "a country" is substituted by "Norway."

Dr. Galenson who is assistant professor of economics at Harvard University, conceived this study while he was serving as labor attaché to the American Embassy in Oslo during 1945 and 1946. This work brought him into

intimate contact with Norwegian experts on industrial relations and with influential individuals within the Norwegian government, The Employers' Association, the Trade Unions, and the political parties. The author utilized this opportunity remarkably well. He has succeeded not only in giving a correct and thorough discription of Norwegian institutions and policy; but he has also clarified in an excellent way the major problems which the Norwegian labor movement is confronted with today.

The opening chapters of Dr. Galenson's book deal with the history and structure of the labor movement and the employers' organization. Among other things he points out that the Norwegian trade unions are considerably more centralized than the American and that during several decades they have suppotted the Labor Party which in 1945 gained the majority of the Norwegian Parliament (Stortinget). A corresponding unlikeness on the employers' side is the willingness of Norwegian employers to delegate the handling of labor relations to specialists of the Employers' Association.

Next are considered the Norwegian attempts to mitigate the effects of industrial strife through legislation, and also the history and results of the industrial relations process. Of particular interest is Dr. Galenson's discussion of the Norwegian experiment with mediation combined with a "cooling off" period, and of the distinction between "disputes over right" which are handled through a Labor Court and "disputes over interests," which are handled differently. Furthermore, a thorough analysis is made of the intricate pattern of industrial labor practices that have been embodied in the written collective agreements governing conditions of work for most Norwegian employees.

The remainirg one-third of the book, dealing with the impact of a labor government upon the labor market, is introduced by a concentrated and well-balanced description of postwar Norwegian economic control and planning. The ensuing chapters dealing with postwar labor legislation and wage determination, and with the problems of trade unions under a labor government, present a most interesting analysis of labor against the background of the general economy and economic policy. Dr. Galenson has correctly pointed out that the achievement of political power by labor has implied a fundamental change in the essence, if not in the form of employer-employee relations. The trade union's bargaining power has increased greatly, and the trade unions have attained an important influence on economic policy in general. This increased responsibility has resulted in a changed attitude toward the strike weapon, toward scientific management, toward wage incentive plans, etc., a change which is still going on. The reviewer agrees with Professor Sumner H. Slichter in his statement that "The most important part of the book is Dr. Galenson's penetrating discussion of the effect of power upon trade unions and the labor party."

Not only those who are interested in industrial relations but anyone with interest in problems of economic policy may read this book with profit and enjoy it.

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Population; Social Welfare and Living Standards

Readings in Social Security. By WILLIAM HABER and WILBUR J. COHEN. (New York: Prentice-Hall. 1948. Pp. xix, 634. $5.75.)

Much of the most worthwhile literature relating to social security philosophy and practice has existed only in scattered and fragmentary form—technical articles, speeches, Congressional hearings and governmental reports, some of which have never been generally available. Not only has some of the most stimulating thinking in the social security field thus been lost to the teacher, student, and administrator, but there also has been no one book or even group of books which a student could peruse with reasonable certainty of covering all of the more significant viewpoints.

In this collection of writings on all phases of social security, Messrs. Haber and Cohen have done much to provide a remedy. The broad scope of the book's subject matter is amply demonstrated by the chapter headings: The Problem of Insecurity; Theory and Philosophy of Social Security; Social Security Developments in the United States; Economic and Financial Aspects of Social Security; and Appraisal and Criticism as well as chapters devoted to each of the major social security programs. The general introduction is provocative, and each chapter is prefaced by a brief editorial statement providing background and perspective. The value of the book is amplified by the presentation of a list of selected references at the end of each topical chapter, by generally adequate indexing, and by a pleasing format.

No point is served by attempting here to evaluate either the appropriateness of the specific selections or the thinking of the authors represented in the collection. The editors have attempted with apparent success to present a balanced and suggestive collection including, in their own words, "the important opinions which bring out the major lines of reasoning—good, bad, and indifferent—from which the reader can develop his own point of view." While the editors' stature in the social security area would amply justify a liberal inclusion of their own views, they have not taken advantage of the opportunity.

As economists, we may be surprised that only four of the 65 selections are presented under the heading, "Economic and Financial Aspects of Social Security." With one exception, these consist of writings (by Sumner Slichter, Eveline Burns, and J. Douglas Brown) which appeared in the March, 1940 Supplement to this *Review*. The more up-to-date selection, written by Eliot Swan in 1946 as part of the Federal Reserve System's series of postwar economic studies, presents an especially helpful summary analysis of social insurance financing problems with emphasis upon their fiscal policy aspects.

Naturally, the economist will also find much to interest him in other parts of the book. But this is clearly not the place to look for a systematic treatment of social security in the framework, for instance, of national income analysis or in the context of any of the appropriate branches of economic theory.

To some extent the scarcity of such material which would be helpful to the

student of economics reflects inadequacy in the literature as well as a deliberately different purpose on the part of the editors. In general, the selections were undoubtedly designed to discuss the social security program in all its aspects—philosophical, administrative, legal, social, and political, as well as economic.

The collection is of more than historic and reference interest. The statements presented on medical care insurance, for instance, will be most useful as a source of relatively dispassionate arguments pro and con. The inclusion of important conclusions of the Senate Advisory Council on Social Security (1948) adds materially to the collection's immediate usefulness. And an article prepared by the present Social Security Administrator on the relationship of private health and welfare plans to the basic social security system is likely to be of interest in connection with recurrent labor-management negotiations on this subject.

One might wish for the inclusion of more material on foreign social security thinking, on the "social security" which is provided exclusively for war veterans, on the economics of transfer payments in general; and perhaps for the inclusion of texts (or digests) of pertinent legislation. Nevertheless, the significant lines of thinking are represented in the book. And in the continued absence of a new and authoritative textbook on social security, this volume is apt to prove much more useful than the ordinary collection of collateral readings.

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TITLES OF NEW BOOKS

Economic Theory; General Economics

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AUBERT, *La courbe d'offre.* (Paris: Presses Univ. de France. 1949. Pp. 263. 600 fr.)

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Guide to the collections. (London: British Lib. of Pol. and Econ. Sci. 1948. Pp. 136. 2*s*., 6*d*.)

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NOTES

The annual meeting of the American Economic Association will be held at the Commodore Hotel, in New York City, December 27-30, 1949. A preliminary program was announced in the September number and a more complete program has been sent to all members with a ballot for the election of officers for the coming year.

Editorial Note on Bibliography

In preparing the bibliography for the Periodicals department of the *Review*, there always exists an insoluble problem of where to draw the line. For domestic publications the problem is not particularly serious. The listings are mainly from the technical journals of economics and other social sciences, but also include many gleaned, not too systematically, from other sources. Editorial efforts are now being made to reduce the latter to more systematic coverage, drawing the line against the too ephemeral and those too far on the fringe of economists' interest.

The case of foreign listings, however, is more baffling. After the war, without any particular plan, more and more listings were gradually made from the renascent economic and related journals, even those in the less well-known languages, and from the numerous Latin American journals. This produced a large number of entries either of dubious value or accessible to only a few readers.

We have come to the conclusion that the *Review* could without serious disadvantage to its readers cut down rather sharply on entries from these sources, and in particular from journals in the more esoteric languages. This policy is based in large part upon the valuable service being rendered by the *Economic Journal* (London) in publishing the table of contents of most of the European and some other foreign language economic journals. We assume that most American scholars interested in economic articles published in Scandinavian, Dutch Polish, Czech and other journals have access to the *Economic Journal* and can secure their bibliographical guidance from that source. The addresses of most of the journals can be found in the 1948 *Handbook* of the American Economic Association, beginning at page 337.

The *Review* will continue its comprehensive listing of articles in the English-language journals and a somewhat more selective listing from journals in the more widely known European languages.

While speaking of bibliography, a word may be said about the Titles of New Books department of the *Review*. A rather extensive inquiry was made among readers of the *Review* to find out whether we might not save space by listing fewer relatively ephemeral or unimportant items, especially in the pamphlet field. It appeared, however, that many specialists desired to have such material called to their attention. The policy in this respect will therefore remain unchanged.

Opportunities for Study, Research and Teaching Abroad

Numerous opportunities to do graduate work or advanced research, or to serve as visiting professors, are offered to American economists under the Fulbright Act.

Graduate students interested in the possibilities for study should make application to the Fulbright Program adviser at their university or, if not currently enrolled, to the Institute of International Education, 2 West Forty-fifth Street, New York 19, N.Y.

Persons interested in the opportunities for visiting professors and research scholars should write to the Conference Board of Associated Research Councils, 2101 Constitution Avenue, Washington 25, D.C.

Establishment of Joint Committee on Southern Asia

The American Council of Learned Societies and the Social Science Research Council have established a Joint Committee on Southern Asia for the purpose of appraising

American studies relating to India, Pakistan and Southeast Asia and making plans for their further development. Those interested in the work of the committee should communicate with Miss Alice Thorner, Executive Secretary, Box 17, Bennett Hall, University of Pennsylvania, Philadelphia 4, Pennsylvania.

An Institute of Social and Economic Research has been established at University College of the West Indies, Jamaica, West Indies. The director is Mr. H. D. Huggins.

Deaths

Benjamin M. Anderson, January 19, 1949.
Frank D. Graham, September 24, 1949.

Appointments and Resignations

Carl E. Abner has been appointed instructor in economics at the University of Louisville.

Robert J. Agnew has been appointed instructor in the industry department, School of Business Administration, University of Pittsburgh.

Norman Albrecht has been appointed graduate instructor in economics at Tufts College.

Sidney S. Alexander has resigned as assistant professor of economics at Harvard University to take a position with the International Monetary Fund.

Graydon K. Anderson, of the University of Wisconsin, has been appointed assistant professor of economics at San Diego State College.

Ivar Axelson has been named lecturer in marketing at the University of Miami.

Joe S. Bain, Jr., has been promoted to professor of economics at the University of California, Berkeley.

Ralph L. Baker has been promoted to an associate professorship in the department of economics and sociology at Iowa State College.

Robert Banzhaf has been appointed instructor in economics and commerce at the University of Chattanooga.

Robert A. Battis has been appointed instructor in economics at Lafayette College.

F. N. Beard has been appointed assistant professor of accounting in the department of political economy at the University of Toronto.

William N. Bergstrom has been promoted to the rank of associate professor of accounting in the College of Business Administration, Marquette University.

Robert E. Bickner is an instructor in the College of Business Administration, University of Georgia.

Warren J. Bilkey has been appointed instructor in economics at the University of Connecticut.

Leonard J. Bisbing has been appointed associate professor and chairman of the department of marketing, and director of the Bureau of Economic and Business Research in the College of Business Administration, Marquette University.

Martin L. Black is on leave from Duke University to work with the Atomic Energy Commission.

Jacob J. Blair, formerly staff arbitrator for the U. S. Conciliation Service, has been appointed professor of economics in the School of Business Administration, University of Pittsburgh.

Roy G. Blakey has been appointed visiting professor of economics at the University of California at Los Angeles for the current year.

Fred Blum has been appointed lecturer in economics for the fall term at Michigan State College.

George D. Bodenhorn has been appointed lecturer in economics at the University of California at Los Angeles.

S. Lees Booth has been appointed instructor in economics at Lafayette College.

Richard M. Bourne has been promoted from instructor to assistant professor of economics and labor relations in the College of Business Administration, University of Nebraska.

Royal Brandis has been appointed instructor in economics at Duke University.

Jack Bright has been appointed instructor in accounting at Illinois Institute of Technology, Chicago.

Royal J. Briggs has resigned as professor of economics at Central Missouri State College to accept a post at Superior State College, Superior, Wisconsin.

Henry D. Brohm, of the University of Illinois, has been appointed associate professor of marketing at the University of Florida.

O. L. Brough has been appointed professor of economics at Iowa State College.

Yale Brozen has returned to Northwestern University after a six months' leave of absence, during which he served as consultant for the Social Science Research Council's Committee on Social Implications of Atomic Energy and Technological Change.

Edward C. Budd has been appointed assistant professor of economics in the College of Commerce and Business Administration, University of Illinois.

M. M. Bronfenbrenner is on leave from the University of Wisconsin to do tax research work for the United States Army in Japan.

R. L. Bunting has been appointed assistant professor of economics at the University of North Carolina.

Daniel W. Burch is agricultural economist in the tax section of the Bureau of Agricultural Economics.

John F. Burke has been promoted from associate professor to professor of accounting at the University of Georgia.

John A. Buttrick, formerly of Yale University, has joined the staff of Northwestern University as an instructor in the department of economics.

Leonard F. Cain has been appointed instructor in economics in the Graduate School of Social Science, The Catholic University of America.

Francis J. Calkins has been promoted to the rank of professor and chairman of the department of finance in the College of Business Administration, Marquette University.

Carl E. Calohan, of the University of Alabama, has been appointed instructor in economics at the University of Florida.

James J. Carney, Jr., has been named chairman of the department of finance at the University of Miami.

Robert Campbell has been appointed assistant professor of economics in the College of Commerce and Business Administration, University of Illinois.

W. M. Capron has been appointed assistant professor of economics in the College of Commerce and Business Administration, University of Illinois.

Leonard Chadwick, of the University of Nevada, has been appointed assistant professor of economics at San Diego State College.

W. E. Chalmers has been promoted to professor of economics and has been appointed acting head of the Institute of Labor and Industrial Relations, University of Illinois.

Neil W. Chamberlain has been promoted to the rank of associate professor of economics at Yale University.

Lester V. Chandler, of Amherst College, served during the summer as staff economist for the Subcommittee on Monetary, Credit and Fiscal Policies of the Joint Committee on the Economic Report and is continuing in that capacity on a part-time basis this year.

Robert F. Clark has retired from the Marietta College faculty, where he has been professor of economics and sociology since 1922.